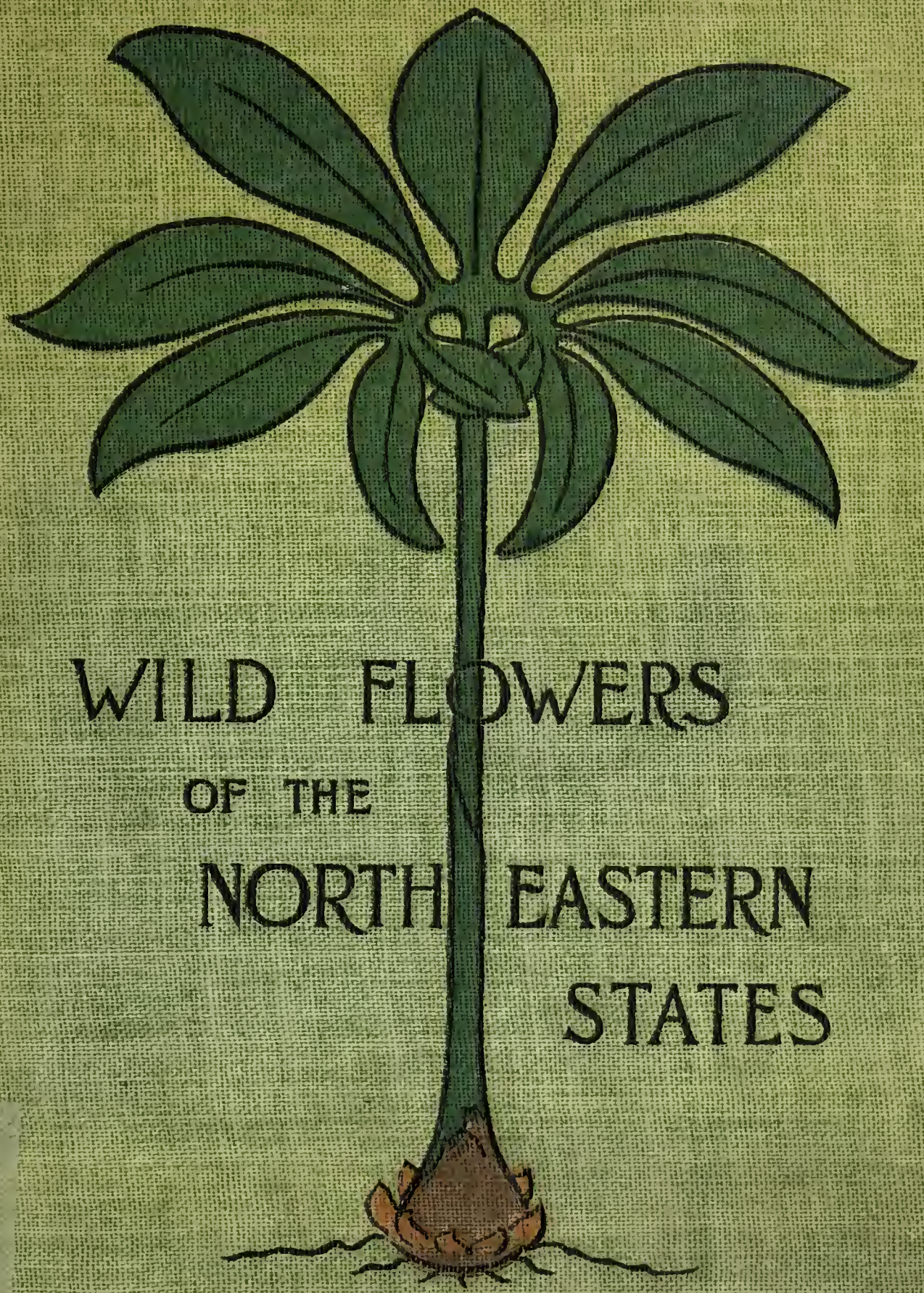

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WILD FLOWERS

OF THE

NORTH-EASTERN STATES

BEING THREE HUNDRED AND EIGHT INDIVIDUALS
COMMON TO THE NORTH-EASTERN UNITED
STATES, DRAWN AND DESCRIBED
FROM LIFE BY

ELLEN MILLER
AND
MARGARET CHRISTINE WHITING

WITH THREE HUNDRED AND EIGHT ILLUSTRATIONS
THE SIZE OF LIFE

G. P. PUTNAM'S SONS

NEW YORK
27 WEST TWENTY-THIRD STREET

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1895

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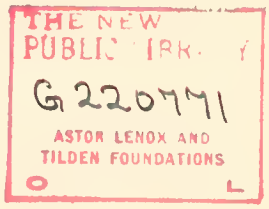

The Knickerbocker Press, New York

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Dedicated

TO

MARY GOODRICH WHITING

AND

MARY ESTHER MILLER

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INTRODUCTION.

It was with no desire to compete with scientific botanies that this collection of flowers was gathered together, but with the hope of making their acquaintance more easy to non-scientific folk than the much condensed manuals of our flora are able to do. The opportunity of introducing a plant, with that graceful amplitude which forestalls human meetings, is denied to the scientific botanist by the needful restrictions of his formulæ, and there remain unnoted by him (because beyond the scope of a special terminology) numberless traits of race-habit, and personal details of growth belonging to the plants, to which the unlearned observer will attach a degree of significance, incommensurate, perhaps, to their scientific value. To the simple Nature-lover each growth possesses a personal quality more desirable than the catalogued facts of its existence, and which offers an invitation to his thought beyond the knowledge he may gain from books.

Supplementary, then, to the scientific classification, there is a place for the mere lover and observer, who shall display the results of his study in the most direct terms, that require no glossaries of explanation, nor, if it may be avoided, any dissection of flower-growths. Too often the amateur is dismayed, in his effort to name a plant, by the botanical need of a microscopic analysis, which calls for a preliminary training, and in its process destroys the flower he seeks to know. If it were possible for a pictorial botany to be prepared for English readers in the

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common vocabulary, the destructive element which, at present, occupies a painfully large place in the study of all popular science, might be confined to the needs of the higher student, and no longer pursued by children, or the merely curious observers of our common forms of life. The effort to verify what has already been established, which, in some intellectually alert localities, threatens the more delicate of our annuals and biennials with extermination, might be avoided, if we were able to recognize the commoner sorts of plants by their general character, their gesture, color, and habits, leaving scientific analysis for serious study.

The present collection of flowers common to the North-eastern United States, which was started as a personal pastime, has taken its present shape under the belief that it were well to make a beginning towards a floral portrait-gallery; it is from this point of view, rather than from the purely botanical, that the drawings have been made and the descriptions written. Days have been pleasantly spent in searching for a specimen which would show most typically the particular trick of growth, the characteristic gesture which individualized it from all other plants; often a flower has been drawn and described as it grew, surprised in its familiar haunt. Effort has been made to gather within the prescribed limits as great a diversity of growths, and as many variations of types in each family, as was feasible. Because of the desire to localize the collection, somewhat, the flowers of the sea-board have been excluded. A few shrubs, and even one small tree, the Witch Hazel, have been included, because their flowers or fruit form such essential features in the floral calendar, or possess so strong a hold upon the wayfarers' affections, that their presence has seemed inevitable. In the case of two vines, the Carrion Flower and the Virginia Creeper, the drawings were made from the fruit (companioned by the figure of

the single flower) for the obvious reason that the blossoms of the one are inconspicuous, and of the other so malodorous, they offer small temptations to a near acquaintance, while both are recompensed with highly decorative berry-clusters. The drawings of the flowers are the size of life: in every possible instance the growth also is given without reduction.

That every flower-lover will find some favorites omitted, is altogether probable, in a selection of three hundred individuals from among the hosts which invite representation. The extreme dry weather of the previous season must be held accountable for several noteworthy, and much regretted, blanks in the list.

The choice of botanical terms has been intentionally confined to those which long usage has so wrought into the common speech that they have practically ceased to belong to strictly scientific nomenclature. The floral families have been arranged in the order employed in Gray's *Manual*; the individual members of a genus, and of a family, have been placed in their usual sequence of bloom, that the flower-gatherer may know when to reasonably expect the successive blossoming of any special set of plants. It is impossible however to be arbitrarily definite in any such classification of Nature's methods. Nor are we able to do more than to approximate accuracy in describing color; modifications, even direct contradictions, of the normal or usual type are constantly discovered, which we may impute to variations in soil or temperature, but whose appearance follows laws we dimly apprehend. Of one thing only may we be sure: Nature tunes her seemingly fickle choice to harmony, whatever the key: always there remains a perfect adjustment of color between stalk and stem and leaf and blossom.

Introduction.

By the generosity of Mrs. Fanny D. Bergen, of Cambridge, Mass., the lists of folk-names for many flowers have been greatly enriched. Recognition is due also to Dr. B. F. Robinson, and to his assistants of the Harvard Herbarium, for very kind aid in the botanical classification of specimens.

Deerfield, Mass.,
April 3d, 1895.

CONTENTS.

	PAGE
Crowfoot Family, *Ranunculaceæ*	1
Barberry Family, *Berberidaceæ*	32
Water-Lily Family, *Nymphæaceæ*	36
Pitcher-Plants, *Sarraceniaceæ*	40
Poppy Family, *Papaveraceæ*	42
Fumitory Family, *Fumariaceæ*	46
Mustard Family, *Cruciferæ*	50
Rock-Rose Family, *Cistaceæ*	60
Violet Family, *Violaceæ*	62
Pink Family, *Caryophyllaceæ*	76
St. John's-Wort Family, *Hypericaceæ*	90
Mallow Family, *Malvaceæ*	94
Geranium Family, *Geraniaceæ*	96
Holly Family, *Ilicineæ*	104
Staff-Tree Family, *Celastraceæ*	106
Buckthorn Family, *Rhamnaceæ*	108
Vine Family, *Vitaceæ*	110
Milkwort Family, *Polygalaceæ*	112
Pulse Family, *Leguminosæ*	116
Rose Family, *Rosaceæ*	144
Saxifrage Family, *Saxifragaceæ*	178

Contents.

PAGE

ORPINE FAMILY, *Crassulaceæ* 188

SUNDEW FAMILY, *Droseraceæ* 190

WITCH-HAZEL FAMILY, *Hamamelideæ* 192

EVENING PRIMROSE FAMILY, *Onagraceæ* . . . 194

GOURD FAMILY, *Cucurbitaceæ* 204

PARSLEY FAMILY, *Umbelliferæ* 206

GINSENG FAMILY, *Araliaceæ* 220

DOGWOOD FAMILY, *Cornaceæ* 224

HONEYSUCKLE FAMILY, *Caprifoliaceæ* 226

MADDER FAMILY, *Rubiaceæ* 238

COMPOSITE FAMILY, *Compositæ* 246

LOBELIA FAMILY, *Lobeliaceæ* 356

CAMPANULA FAMILY, *Campanulaceæ* 364

HEATH FAMILY, *Ericaceæ* 370

PRIMROSE FAMILY, *Primulaceæ* 408

DOGBANE FAMILY, *Apocynaceæ* 418

MILKWEED FAMILY, *Asclepiadaceæ* 422

GENTIAN FAMILY, *Gentianaceæ* 436

BORAGE FAMILY, *Borraginaceæ* 440

CONVOLVULUS FAMILY, *Convolvulaceæ* 444

NIGHTSHADE FAMILY, *Solanaceæ* 450

FIGWORT FAMILY, *Scrophulariaceæ* 452

BROOM-RAPE FAMILY, *Orobanchaceæ* 484

VERVAIN FAMILY, *Verbenaceæ* 486

MINT FAMILY, *Labiatæ* 492

POKEWEED FAMILY, *Phytolaccaceæ* 518

BUCKWHEAT FAMILY, *Polygonaceæ* 520

Contents.

	PAGE
Birthwort Family, *Aristolochiaceæ*	528
Laurel Family, *Lauraceæ*	530
Mezereum Family, *Thymelæaceæ*	532
Sweet-Gale Family, *Myricaceæ*	534
Orchis Family, *Orchidaceæ*	536
Iris Family, *Iridaceæ*	564
Amaryllis Family, *Amaryllidaceæ*	568
Lily Family, *Liliaceæ*	570
Pickerel-Weed Family, *Pontederiaceæ*	596
Cat-Tail Family, *Typhaceæ*	598
Arum Family, *Araceæ*	600
Water-Plantain Family, *Alismaceæ*	610

The Cover-Design by E. M.: Derived from the Green Dragon (Arisæma Dracontium) Plant.

WILD FLOWERS

OF THE

NORTH-EASTERN STATES.

CROWFOOT FAMILY.

RANUNCULACEÆ.

Hepatica. *Hepatica triloba.*

Liverwort.

Liver-leaf.

Found in April and May, on hillsides, along the edge of woods, and in rocky ground.

The leaf-stems and flower-stems rise from the ground to the height of 4 or 6 inches.

The leaf is heart-shaped, and 3-lobed, of a tough, strong fibre that often survives the winter. Its color is dark green above and dull violet beneath.

The beautiful flower is composed of 6 to 9 petal-like calyx-parts, of an oval shape, and thin texture, whose color varies from light to dark violet, and from lavender-tinted white to a very pink-lavender, or lilac; the stamens are many, and thread-like, and of a pale straw color.

Close beneath the flower are 3 reddish-brown, downy little leaves, bearing the semblance of a calyx. The flower is set on a slender, very downy stem, which springs from amidst the leaves.

The harmony of color in this plant as seen in the flower and leaf is striking, a preponderance of violet showing throughout. It is very downy, the young leaves being covered with long silky hairs. The numerous half-opened flowers and buds are slightly nodding, but become more erect when fully spread in the sunlight. The Hepatica is often frequented by small lavender butterflies, in size and color resembling the blossoms,—when they rise and flutter in the soft spring air, it is as though the flowers themselves are taking flight.

HEPATICA : Hepatica triloba.

Crowfoot Family.

Marsh Marigold. *Caltha palustris.*

Cowslips.

Found in late April and early May, in swamps or wet meadows, with its roots in the water.

The branching stalk, from 6 to 10 inches in height, is thick, stout, hollow and juicy, and grooved at the joints; its color is a shining light green.

The leaf is very broad, almost round, with a heart-shaped base, the margin finely cut in slight scallops; the texture is thin but leathery, while the surface is smooth and glossy; the color is dark green. The leaf is set at the junction of the flower-stem with the stalk.

The flower has 5 (or more) rounded petal-like calyx-parts, of a delicate texture that shows a few veins on the inside; it is shaped like a shallow cup and colored a beautiful polished yellow, tinged with green; the many stamens are yellow; the pistils form a conspicuous fringy center. Two or three flowers, on simple, or sometimes leafy foot-stems, form a terminal group.

The buds are round and quite green, turning yellow as they grow; the blossom opens very wide, and is slightly odorous,—it is in marked contrast to the coarser stem and leaf, which have a sprangly gesture. The first sunshine flower of spring.

MARSH MARIGOLD: Caltha palustris.

Wind Flower. *Anemone nemorosa.*

Wood Anemone.

Found in thickets that yet are open to the sun, in early May or perhaps late in April.

The single stem, about 6 inches in height, is round and smooth and green, showing purple at the foot. It bears a whorl of leaves about midway its height, and a single flower upon its summit.

The compound leaf has from 3 to 9 wedge-shaped leaflets, that are slightly creased on their midribs, and irregularly notched on the edges; the texture is delicately thin, and the color a lovely green. Three leaves on their short reddish stems are placed in a whorl.

The flower is like a shallow cup formed of 5 oval, petal-like calyx-parts that curve like shells; it is of a very thin texture and slightly veined, and its color is pure white, often rosy tinted on the outside; the many dainty stamens are a pale straw color, and the pistils are gathered into a light green center.

A more charming plant could hardly be imagined,—stem, leaf, and blossom are alike perfect in growth and harmony of hue. Its bud nods, but the fully open flower lifts itself lightly atop the slender swaying stem. The Wind Flower is social in habit, and gathers in lovely fellowship with its kind upon a favorable hillside.

WIND FLOWER : Anemone nemorosa.

Crowfoot Family.

Tall Anemone. *Anemone Virginiana.*

Found during July and August in meadows, roadsides, and woods.

The single stalk usually forks midway for the flowers; it grows between 2 and 3 feet high, and is slender and slightly rough to the touch. In color it is light green.

The compound leaf is 3-divided, the middle leaflet being 3-parted, and the side leaflets 2-parted; the margins are notched, and the fibre is tough, while the surface is rough-hairy; the color is green. The leaves grow in a whorl of 3 about the stalk.

The flower is a shallow cup, composed of 5 petal-like calyx-parts, hollowed like shells, of a greenish-white color; the pistils are many, rising in a cylindrical greenish head in the center; the stamens are numerous, and pale. The flowers are set on long slender stems which rise from the whorl of leaves; these stems often fork again at half their length, where in that case, they bear a pair of small leaves, from which the 2, or more, secondary flower-bearing stems arise.

Less gregarious than its early sister, the Tall Anemone grows solitary, or in twos and threes,—frequently beside an old stump. The cylindrical or elongated head turns brown and becomes cottony when the seeds are ripe. The tall elegance of this plant is noteworthy; it bears its leaves, flowers and seeds with an air of distinction, and the long wand-like stems suggest the strings of some musical instrument on which the wind may play, according to the old tradition that the Anemones love to bloom when the wind blows.

TALL ANEMONE: A. Virginiana.

Crowfoot Family.

Early Meadow Rue. *Thalictrum dioicum.*

Found in rocky woods and hillsides during April and May.

The branching leafy stalk grows from 1 to 2 feet high; smooth, round, and fine of fibre though strong; in color, green.

The leaf is 3 or 4 times divided, terminating in groups of 3 leaflets on short slender stems; the leaflets are small, rounding, slightly heart-shaped at the base, and their margins are notched in rounded scallops; the texture is exceptionally fine and thin, the surface smooth; the color, a fine cool green.

The flower is small and composed of 3 or 4 or 5 little, petal-like, pale green calyx-parts. Different plants bear the pistils and stamens; the flowers of the former are inconspicuous and sparse in comparison with those of the stamen-bearing plant: from these the many stamens, pale green faintly touched with tawny at the tips, droop on slender threads like little tassels. The flowers grow in loose clusters, on branching stems that spring from the leaf-joints.

The Early Meadow Rue is unobtrusive in color and form, but most graceful in gesture, and fine in the texture and finish of all its parts; the leafage has a fern-like delicacy, and the flower tassels of the stamen-bearing plant are airily poised.

EARLY MEADOW RUE: Thalictrum dioicum.

Tall Meadow Rue. *Thalictrum polygamum.*

Found in June in wet meadows, both in the shade of thickets and in unsheltered fields.

The stalk, usually 3 or 4 feet high, attains, it is said, to even 9 feet sometimes; it is branching, and somewhat zigzag in growth; round, slightly ribbed, and smooth; green or purple, especially near the joints.

The leaf is highly compound, being composed of 3 long-stemmed divisions which are parted into 3 or 5 short-stemmed groups of 3 leaflets each; these leaflets are rounding in shape, entire,—save for the 1 to 3 round scallops at the tips,—of a fine and thin texture, and smooth surface; a network of delicate veins shows underneath; the color is a beautiful, cool, dark green, lighter underneath. The arrangement is alternate.

The flower is without petals; the numerous thread-like, white stamens, with their green tips, spread into feathery tufts, and are set on tiny stems in loose terminal clusters, and also in lesser groups on stems from the angles of the upper leaves.

An elegant plant, beautiful at all seasons with its distinguished-bearing, charming flower clusters, and quaint lavender-hued seed-heads; and especially attractive at the turn of the leaf, when its foliage takes on a delicate crimson tint toned by a grayish bloom.

TALL MEADOW RUE : T. polygamum.

Crowfoot Family.

Rue Anemone. *Anemonella thalictroides.*

Found in woods and on shady banks, in May.

The slender, erect stalk, 5 or 6 inches in height, is fine and smooth; in color, a light reddish-tinged green.

The leaf is compound, each part being set on a slender, rather long stem; the leaflets are small, broad, heart-shaped at the base, and 2- or 3-lobed near the tip; the texture is exceedingly fine, and smooth to the touch; the color is a dark grayish-green. The leaves form a whorl about the summit of the stalk, from which the flower-stems rise.

The flower is formed of 5 to 8 petal-like calyx-parts, which are oval, slightly convex, of a fine and delicate texture; in color, white, tinged with pale pink. The stamens are many, small, and orange yellow; the several pistils gathered in the center are green. The flowers are poised on slender stems, in groups, generally of 3, springing from the leaf-whorl.

The flowers and leaves rise from the earth together, the undeveloped flower, with bowed head, enfolded by the leaflets; as the plant pushes upward the blossoms grow, the central one developing first, the side ones later. At first the stamens and pistils are gathered together in a close green ball in the middle,—when the central flower has shaken out its yellow-tipped stamens fully, the side flowers begin to grow; thus the plant stays in bloom a long time—nearly two weeks.

RUE ANEMONE : Anemonella thalictroides.

Goldthread. *Coptis trifolia.*

Found during May in moist woods.

The root sends up flowers and leaves on stems from 3 to 5 inches high.

The leaf is compound with 3 small leaflets that are wedge-shaped, with notched margins, tough texture, and smooth, shining surface; it is set on a long slender stem. Evergreen, and of a dark green color.

The flower is small; of 5 or 7 narrow, tapering calyx-parts that are a fine silvery-white color. The true petals are inconspicuous and easily confused with the numerous stamens and pistils. The flower-stem is long and slender.

This has a shining flower and leaf. The bright yellow thread-like roots give it its common name.

GOLDTHREAD : Coptis trifolia.

Cohosh. *Actæa spicata,*

Red Baneberry. *var. rubra.*

Found in the woods during May.

The small round smooth stalk branches near the top, and grows about 2 feet high. It is green, with a cool gray-white bloom.

The leaf is rather large, and compound, being 2 or 3 times divided; the leaflets are oval, taper-pointed, and set on long, grooved, shining foot-stems; the margin is prettily toothed, with an occasional deep notch, the ribs and veins show like a fine network, the texture is loose, with a noticeable softness to the touch, the surface is shining; the color green. The leaf is set immediately upon the stalk.

The flower is very small; 4 to 10 white petals with oval tips and very slender bases; the many delicate, white stamens, with yellow tips, are longer than the petals. The flowers are arranged in a large, loose, round or club-shaped spike, on a long smooth stem, that springs from the junction of the leaf.

The calyx drops as the flowers open, and the petals soon fall also, leaving the stamens, which remain some time; these are succeeded by the ripening berries that are to be seen frequently during August in deep woods; they are oval in shape and of a shining coral red. The plant seldom bears more than a single spike of flowers.

The White Baneberry, *A. alba*, is very like the Red, but its berries (called "Dolls' Eyes" in Massachusetts) are shining white with a black dot, and their foot-stems are noticeably larger.

COHOSH : Actæa spicata, var. rubra.

Crowfoot Family.

Columbine. *Aquilegia Canadensis.*

Found growing in the clefts of rocks, on sunlit heights, and along banks, during May or June.

The height of the stalk varies from 6 to 18 inches, and it branches widely; it is small, slightly enlarged at the joints, and somewhat square in shape, sometimes rough to the touch; the color is green, strongly tinged with purple-red.

The lower leaves are compound, with 3 leaflets, their margins round-toothed; the upper leaves are oval, or sometimes divided, their margins frequently entire; the texture is very thin and fine; the color light green. They are set on long, slender stems, or at the junction of the branches.

The flower varies a good deal in size; it consists of 5 tubular petals that are prolonged into slender spurs with rounded tips: the calyx is 5-parted, the divisions of a long oval shape, which curve closely between the spurs, alternating with the tubes. The color of the tubes is a pure and lovely yellow, which becomes, by a beautiful gradation, a deep red in the spurs, their tips even tending toward crimson: the calyx is orange-red, running to yellow-green at the stem; the many long stamens hanging in a central tassel are very yellow. The flower nods on the end of a curved stem, with its spurs uppermost.

In early spring the plant consists of a thick tuft of leaves. While still very small the bud begins to turn from pale green to reddish. In maturity the seed-pods become erect. The singular elegance of this plant is only too well appreciated, for human greed plucks it in reckless handfuls, without regard to its possible extinction.

COLUMBINE: Aquilegia Canadensis.

Marsh Crowfoot. *Ranunculus septentrionalis.*

Found during May and June growing in moist meadows, beside runlets.

The large, round, hollow stalk grows between 1 and 2 feet high; it branches, and often lies somewhat upon the ground; it is finely grooved, and light green in color.

The compound leaves are 3-divided; each of the leaflets of the lower leaves is provided with a short foot-stem, they are wedge-shaped, broad, and the margins are cut and notched; those of the upper leaves are long and narrow, of unequal size, with entire margins. The texture is loose, the upper surface very hairy, the underside shining; color, a mottled green, lighter underneath.

The large flower is like a shallow cup formed of 5 oval petals, of fine texture and shining with an exceeding gloss; their color a full orange-tinted yellow. The stamens are many, and orange-yellow; the numerous pistils are gathered into a round green center. The calyx is 5-parted, shorter than the petals; greenish-yellow. The flowers are set on short stems, in terminal groups.

After flowering, the plant throws out from the root long, thick, pale runners; these bear an occasional leaf, at the joint of which a new root forms.

MARSH CROWFOOT : Ranunculus septentrionalis.

Buttercups. *Ranunculus acris.*

Tall Crowfoot.

Found during June and July in meadows and fields.

The stalk, which grows from 2 to 3 feet high, is branching, round, tough-fibred, and hairy ; a strong, bright green color.

The large leaf is cleft into 3 or 5 divisions, these again being cut into 3 narrow parts, their tips thus covering the points of a pentagon ; the margin is deeply and sharply notched, the ribs are noticeable, and the surface is downy with soft hairs. In color the leaves are dark green, lighter underneath. The lower leaves are set on long grooved stems, the upper clasp the stalk with a pale, silvery and hairy sheath.

The flower cup is formed of 5 broad petals with pointed bases ; its inner surface is very shining, the outer is dull ; the color is a pure full yellow. The numerous stamens are also yellow, and the many pistils are bunched in a green center. The calyx is 5-parted, the divisions being narrow and pointed, and spreading very wide ; it is a pale yellow-green. The flowers are set on long slender stems.

Though the wealth of bloom occurs in June when the meadow-grasses tassel, the burnished golden cups stray through all the season till frost-time. The bud is very round and small, and the flower grows perceptibly after it has opened.

BUTTERCUPS: R. acris.

Bristly Crowfoot. *Ranunculus Pennsylvanicus.*

Found in moist ground, in June and July.

The stalk (about 2 feet high) is very leafy, stout, round, and hollow, of a coarse fibre, and exceedingly hairy; light green.

The large compound leaf is divided into 3 parts (they are set on hairy stems) that are divided twice again; the parts are sharp-pointed and deeply notched, with the ribs and veins showing plainly, of a coarse, loose texture, and very hairy both above and beneath. The arrangement is alternate, and clasping. The color is light yellowish-green.

The flower is small: a few little round yellow petals and a fringe of yellow stamens surround the base of the long thimble-shaped green head formed by the pistils. The flowers are set on hairy stems in loose leafy groups.

The admirable curve of the stalk is forgotten in the stinging sensation its prickly hairs produce upon the touch; it is very like plucking a nettle to try to gather this Crowfoot, though the effect is comparatively transient.

BRISTLY CROWFOOT : R. Pennsylvanicus.

Purple Clematis. *Clematis verticillaris.*

Found festooning rocks and walls on uplands and mountains in early May.

This handsome vine is sparingly leafy, somewhat branching, and not perfectly round; it is woody-fibred and breaks easily, smooth to the touch, and slightly shining; the color is a light brown of a golden hue.

The leaf is 3-parted, each leaflet upon a slender foot-stem; the leaflets are oval or wedge-shaped, the margin either irregularly cut, or deeply notched, or nearly entire; the many ribs and netted veins show; the texture is somewhat thin, and the surface is sparingly covered—particularly on the underside—by soft hairs. The color is light green, frequently running into red- or purple-bronze hues, especially when young. The leaves are set on long purplish or reddish stems, and arranged in pairs, at a considerable distance apart, along the lithe curving stalk.

The flower is large: its 4 calyx-parts look like petals: they are long oval, with pointed tips, of a particularly thin, loose texture, and have a very downy surface both inside and out; the many veins show distinctly: the color is a light purple of a broken tint, sometimes nearly white on the inner side. The stamens are many and crowded into a close central tuft, the outer row of them shaped like slender oblong petals; in color, green-white with light green-yellow tips. The single blossom is set on a slender green stem which springs from between the leaves.

The flower seldom spreads wide, its seeming petals curve inward in a deep cup-shape. A noticeable feature is the presence of the brown and dry leaf-stems of the last year's growth standing out at right angles to the fresh leafage. This is one of the rarer plants, and therefore should be left where it grows, with free curves clinging to the rocks or swinging its violet-tinged greenery and purple bells from the stronger growth of a neighboring shrub.

PURPLE CLEMATIS : Clematis verticillaris.

Crowfoot Family.

Clematis. *Clematis Virginiana.*

Virgin's Bower.

Traveller's Joy.

Found through July and August climbing over wayside thickets and along river banks.

The stalk of this charming vine is leafy, round, tough-fibred, and grooved, and rather slender. It is green in color, tinged more or less with dull bronzy purple.

The large leaf is compound of 3 leaflets, that are oval with a long, tapering point, and a slightly heart-shaped base; the margin is cut into a few large notches, and occasionally is lobed; the ribs are strong, the texture firm, and the surface is smooth. Each leaflet is set on a short curved stem; the leaves, on their long stems, are placed opposite each other. In color they are dark green.

The flowers are of two kinds, the pistil-bearing blossoms and the stamen-bearing occur on separate plants. The flower of both plants has 4 petal-like calyx-parts, of oblong shape with rounded tips; the color is greenish white; the stamens and pistils are pale green. The flowers grow on short light green stems, in branching clusters from the angles of the leaves and the end of the vine.

The Clematis climbs by means of its leaf-stems, which grow in strong deep curves; it sometimes hooks them over a support, and again clasps them more securely by twisting the stem once or twice around. It is what Ruskin calls a "gadding vine," for it runs riot over stone wall and hedge, stretching out a social hand to every wayside shrub, and swinging its flowery festoons from dry twig to leafy sapling. The green of the leafage is agreeably varied by the purple-bronzy leaves of the new growths; and the silvery feathery seeds, following the pistil-bearing blossoms in September and October, are quite as beautiful as the flower, and have a faint, delightful fragrance of their own.

VIRGIN'S BOWER : C. Virginiana.

BARBERRY FAMILY.

BERBERIDACEÆ.

Barberry. *Berberis vulgaris.*

Found on hilly pastures, in roadside thickets, during May and June.

A shrub, which grows from 3 to 5 or more feet in height, and branches thickly; it is armed with many needle-like spines, and the bark is gray.

The leaf is a small oval with a rounded tip, its edge beset with many short sharp spines; its fibre is tough, and surface very smooth, and the color is a light bluish-green. The arrangement is in rosette-like groups of 5 or more leaves.

The small flower has 6 rounding, concave, yellow petals, a 6-parted calyx, and 6 stamens which curve outward from the circular green pistil and rest their tips in the hollows of the petals. The flowers grow in drooping clusters, hanging from the leafy rosettes all along the ends of the branches with a graceful gesture.

The fruit, ripe in September and October, is an oval red berry, sour and puckering to the taste. The wood is a strong yellow color, and the roots gleam in the freshly turned soil like pieces of gold in the dark earth. In some parts of the country the berries are made into a preserve, and the wood is used for dyeing.

BARBERRY : Berberis vulgaris.

Mandrake. *Podophyllum peltatum.*

May Apple.

Found in woodlands during May and June.

The single stalk, 14 to 18 inches in height, bears upon its summit a pair of great leaves on forking stems; it is large, round, very hard and fibrous, juicy, smooth, and somewhat glossy: a dry, tough, pale sheath enwraps it at the foot. In color it is a very light green, almost white.

The leaves are almost a foot across and nearly circular in shape, divided into 5 or 9 wedge-shaped radiating parts which are often 2- (or more) lobed, and with as many main ribs as there are divisions; all the lesser ribs and veins are conspicuous in these highly ornamental leaves —they have shallow but sharp-pointed margins, and are rather thin in texture, smooth and glossy, and of a rich dark green color, whitened with bloom underneath. The stems are large and pale.

The flower is formed of several wedge-shaped petals (6 to 9), firm and thick of texture, showing many fine-netted veins, and dull white in color; they spread and curve about the base of the prominent greenish seed-box, the large and conspicuous stamens forming a ring in the center. The flower, on a pale stem, grows from between the leaf-stems with a distinct inclination to one side.

In bud the flower is enfolded by 3 temporary bracts,—the 6 calyx-parts also fall when the petals expand. The long rather oval fruit is found eatable by the uncritical palates of children.

MANDRAKE : Podophyllum peltatum.

Leaf about ½, life size.

WATER-LILY FAMILY.

NYMPHÆACEÆ.

Yellow Pond-Lily. *Nuphar advena.*

Cow Lily.

Spatter-dock.

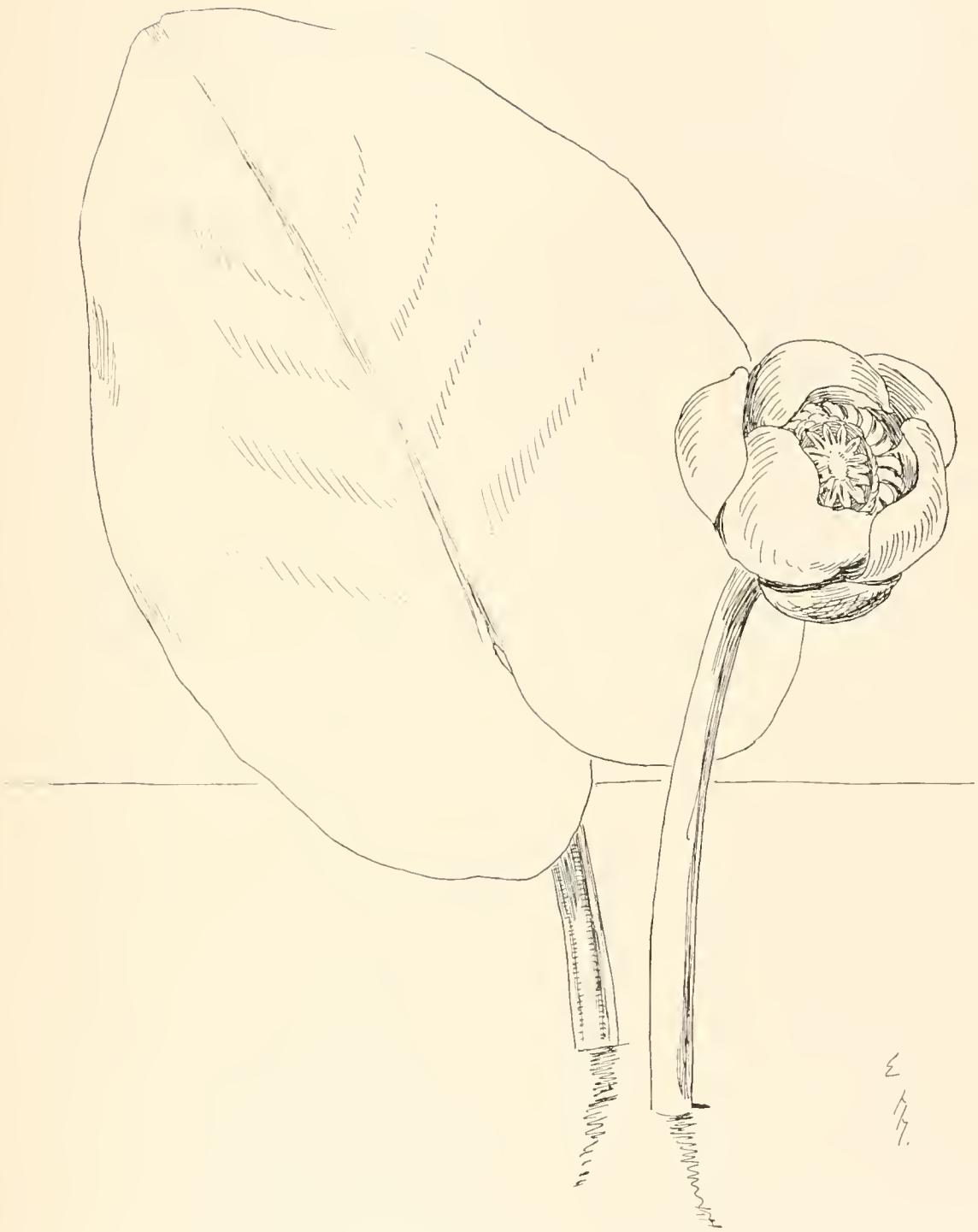
Found in still and shallow water from June to September.

The leaves and flowers, on their long, smooth stems, rise to the surface of the water from the submerged root.

The leaf is large (from 6 to 12 inches in length), of a long oval shape, heart-shaped at the base, and blunt-pointed at the tip, with an entire margin; its fibre is tough and leathery, and its surface exceedingly smooth and shining. Its color is a strong light green, lighter underneath. The stem is large and half-cylindrical; the leaf floats on the water, or rises above it.

The large flower is almost spherical in form, with 6 large, rounded, concave, petal-like parts, somewhat unequal in size; the 3 smaller parts are green without, and a dull reddish-orange color within; the other 3 larger parts are yellow, with small green patches at the base. The large pistil is marked on the top with a 12- or 24-pointed star, the rays of which are yellow on an orange-red ground. The stamens are many, like loops of yellow ribbon which curl back and almost entirely fill the hollow flower-cup. The stem is large, round, and green, and the flower rises above the level of the water.

A flower of primitive type; the combination of yellow and red in the star design of the pistil is suggestive of Egyptian color and design. The half-round leaf-stem with its flat grooved side is an unusual variation on the common form.



YELLOW POND-LILY: Nuphar advena.

Pond-Lily. *Nymphæa odorata.*

Water Nymph.

Found in still, clear water in July.

The flowers and leaves rise to the water's level from the submerged root.

The large leaf (4 or more inches long) is nearly round,—swinging out from the true circle at its heart-shaped base into two little points; its margin is entire; the ribs scarcely show on the upper side, radiating in faint lines from a heart-shaped figure outlined on the base of the leaf, but they are strongly marked on the under side; the surface is smooth and shining, and the texture is fine and firm. The color is a dark strong green above, and a fine coppery-red beneath. The leaf floats flat upon the surface of the water, anchored to the root by a long, elastic, round, red stem.

The many petals of the large flower are long, narrow, pointed, and hollowed like a shallow canoe; of a close, firm texture, and usually a pure brilliant white color. The numerous stamens are a pure cadmium-yellow. The 4 calyx-parts are shaped like the petals, dull green on the outside, and often tinged with pink on the edges and inside. The flower on the top of its long red stem floats on the water.

The fragrant Water Nymph is said to open at sunrise, closing about ten o'clock in the morning, and remaining shut during the heat of the day to open again later. The contrast of its brilliant white with the heart of gold is beautiful, with a charm which is partly lost when plucked,—it is seen to its best advantage floating in the midst of its green pads. The decorative design on the leaf is faintly marked and can only be discovered by close inspection; the color of its lower surface is fine Sometimes the petals are pink-tinted.

POND-LILY : Nymphæa odorata.

PITCHER PLANTS.

SARRACENIACEÆ.

Pitcher Plant. *Sarracenia purpurea.*

Huntsman's Cup.

Side-Saddle Flower.

Found in swamps in early June.

The leaves and flower-stems grow directly from the root.

The curious leaf is in the form of a deep cup or pitcher, with a broad wing on one side, and a flaring top which answers to the lip of the pitcher; the outer surface is smooth while the inner surface is set with many short, downward-pointing bristles; the texture, especially of the old pitchers, is tough and leathery, and the color is a strong green more or less veined with dark red. A number of leaf-cups grow in a cluster close to the ground.

The large flower has 5 long dull red petals rounded at the ends, and folded over the large umbrella-like top of the pistil; beneath this spreading green top is the large seed-case encircled by the many yellow stamens; the 5 spreading parts of the calyx are thick and leathery, of a dull reddish-brown on the outside, and green on the inside, with the brown striking through in places. A single nodding flower grows on the top of a long, smooth, light green stem.

The pitchers are often found half filled with water, and sometimes contain the remains of small insects upon which the plant is said to feed. There is no apparent resemblance to a "side-saddle" in the flower unless it lies in the leathery texture of its parts. It might fittingly be called "the Russia-leather flower."

PITCHER PLANT : Sarracenia purpurea.

POPPY FAMILY.

PAPAVERACEÆ.

Bloodroot. *Sanguinaria Canadensis.*

Found in April on sunny slopes and meadow-borders.

The leaf and flower rise from the root on short stems, from 3 to 6 inches high.

The large leaf (from 4 to 6 inches wide when fully grown) is rounding in shape, with a heart-shaped base, and irregularly cut into 5 or 7 lobes; the ribs are strong, the texture is close and fine—rather thick,—and the surface is smooth. The color is a cool green, silvery underneath, the short stem and the ribs being reddish. The single leaf grows from the root on a thick juicy stem.

The flower petals, usually 8, but sometimes 12 in number, spread in a square shape; they are long, narrow, and tapering at both ends (4 being slightly broader than the other 4), fine in texture, and of a brilliant white; the stamens are many, orange-yellow or golden, and the single large pale yellow pistil is grooved through the middle; the 2-parted pale greenish calyx falls as the blossom expands. The flower-stem is smooth, round, large, and pale green tinged with red.

The Bloodroot makes a wise provision against the inclement season in which it blooms, and comes up from the ground wrapped closely in its circular leaf-cloak, pushing its bud through the top to open in the sunlight. The leaf slowly unrolls itself and stands, large and broad, close to the ground,—in general effect it is suggestive of a grape leaf. The root is charged with a dark orange-red acrid juice which gives the plant its folk-name. To this plentiful rich color, no doubt, the brilliant quality of the white blossom is due.

BLOODROOT : Sanguinaria Canadensis.

Poppy Family.

Celandine. *Chelidonium majus.*

Found from May to August in waste grounds around dwellings, and along hedgerows.

The branching stalk grows from 2 to 3 feet in height; it has a saffron juice, and is covered with scattering, weak hairs; green.

The deeply divided leaf is cut into 5 or more oval irregular lobes which are not quite opposite in their occurrence, the terminal lobe being larger than the others; it is short-stemmed, with a rather weak fibre and smooth surface; the margin is notched in large rounded scallops and the color is yellow-green. The arrangement of the leaves is alternate.

The 4 oval petals of the flower are a lustreless orange-yellow color; the many stamens are yellow, and the pistil is green; the 2-parted calyx falls early.

This weak-fibred plant is of a somewhat sprawling growth; the leaf is more pleasing in shape than in color.

CELANDINE : Cheledonium majus.

FUMITORY FAMILY.

FUMARIACEÆ.

Dutchman's Breeches. *Dicentra Cucullaria.*

Found in rich, moist woodlands in April.

The flower-stems and leaves (from 5 to 8 inches in height) spring from the root.

The large feathery leaf is many times divided and sub-divided in groups of threes, the margin being entire. In texture it is thin and delicate, the surface being noticeably cool to the touch; in color, gray-green, bluish underneath. It is borne on a pale, juicy stem, which is tinged with pink or reddish at the foot. Several leaves spring up enclosed by 2 or 3 dry, reddish sheaths.

The petals of this curious flower are 4 in number, one pair being joined together to form a 2-spurred heart-shaped bag, with its spurs spread widely apart; the other 2 petals held within the narrow mouth of the bag are very small, and join their tips over the slightly protruding stamens; the texture is very thin and delicate and slightly ribbed; the color of the petals is a pure white, the spurs being tipped with pure yellow. The 2 divisions of the small calyx hug the bag betwixt the spurs,—it is white, a trifle tinted with green. The foot-stem on which the bag hangs is small and pale; the flowers are set in a nodding row upon the long curving or upright stem, which is pale or tinted red.

In New England this is a less common variety than its sister Squirrel Corn, *D. Canadensis*, which is very like, though smaller and pink-tinted instead of yellow.

DUTCHMAN'S BREECHES: Dicentra Cucullaria.

Pale Corydalis. *Corydalis glauca.*

Found in woodsy, rocky places during June and July.

The erect and leafy stalk grows from 6 to 15 inches in height, and is slender and smooth, with a slight bloom, which makes its color a pale or whitish-green.

The pretty leaf is not large; it is compound, its 3 leaflets being sub-divided and cut into deep scallops on the entire edges; the ribs are very delicate, the texture thin and fine and smooth; in color, a cool green, the underside whitened by a pale bloom. The lower leaves are on slender, smooth stems, and the upper clasp the stalk; they are placed alternately.

The flower is small, fragile and smooth in texture, and hung upside down; the corolla, like a one-sided flat bag with a round bottom and a 2-lipped mouth, is pale pink, the lips being golden; the 2-parted calyx is pinkish. Three or four flowers hang in terminal groups on slender reddish stems.

The seed-pod is out of all expectation long, frequently over an inch in length, but very slender. The whole plant has a smooth daintiness, and especially is the leaf pretty.

PALE CORYDALIS : Corydalis glauca.

MUSTARD FAMILY.

CRUCIFERÆ.

Toothwort. *Dentaria laciniata.*

Crinkle-root.

Pepper-root.

Found in flower, on the edge of thickets, in May.

A single stalk grows to the height of 6 or 7 inches; it is smooth, round, and juicy; light green.

The compound leaf is very deeply 3 times cut into long, narrow parts, with sharply notched edges; the texture is common (not to say coarse), and the color a full juicy green. Two or three leaves, on short foot-stems, grow in a whorl-like cluster about the stalk, a little below the flower-cluster.

The flower has 4 rounded petals spreading at the top; in texture rather thick, in color white, faintly tinged with violet; the 4-parted calyx is pale green, and the 6 stamens, 2 noticeably shorter than the others, are a dull greenish-yellow.

With the true vigor of its family this plant grows in small communities. It stays in bud a long time before the blossoms finally open. A number of small tubers are strung together on the roots, like beads on a necklace; pungent and peppery to the taste.

TOOTHWORT : Dentaria laciniata.

Herb of St. Barbara. *Barbarea vulgaris.*

Yellow Rocket.

Winter Cress.

Found in sunny places, by clear water and in moist meadows during May.

The single stalk, from 12 to 16 inches in height, is branching only for the flowers; it is large, fibrous, and strong, grooved, but very smooth, and of a shining, pure, green color.

The lower leaves are 3 or 4 inches long, lyre-shaped, and cut nearly to the midrib into 5 or 7 irregular lobes, the middle lobe being very round; the upper leaves are cut less deeply, and are small; the margins are entire, the texture strong, and the lower surface rough, the upper being smooth and shining; in color, dark full green. The lowest leaves are on clasping stems, all the rest clasp the stalk with a pair of wings, alternately.

The 4 petals of the small flower are rounding, and arranged in pairs within the small 4-parted green calyx; they are of a charming light yellow color, and so are the 6 stamens. These stamens group themselves oddly about the central pistil,—two pairs stand in front of the pairs of petals, and the single shorter stamens fill the more open spaces left in the opposite angles. The flowers form loose terminal groups.

The stalk springs from a foot-rosette of the rich green leaves, and is one of the earliest risers of the spring, in its chosen home—a marshy meadow.

YELLOW ROCKET : Barbarea vulgaris.

Mustard Family.

Field Mustard. *Brassica Sinapistrum.*

Charlock.

Crowd Weed (W. Va.).

Found in grain fields, and along cultivated lands, from July to September.

The large and branching stalk is zigzag or curved in habit of growth, about 2 or 3 feet high, and ribbed; with occasional hairs; it is bright green in color.

The lower leaves are lyre-shaped and large, the middle lobe wide and curving to a long pointed tip, the side lobes being narrow; the upper leaves are irregularly cut; the margins are notched (the points of the notches often turn toward the stem), the edge curling or wavy; the midribs and netted veins often pucker the surface, which is shining; the color is a clear full green. They are set on short stems, or clasp the stalk, and are alternately arranged.

The flower has 4 shell-shaped petals, with very long and erect bases, of a fine texture, and yellow color with a tinge of green; the calyx is 4-divided, its parts slender and wide-spreading, also yellow but with a marked tendency to green. The flowers form close leafy terminal clusters.

As the petals fall early and only two or three flowers are open at once, the seed-pods, green and shining, form a distinctive feature of the plant; when they ripen, and in their turn drop, their little foot-stems are left bristling along the elongating branch. The leaf suggests Gothic ornament with its quaint curves and lines.

CHARLOCK : Brassica Sinapistrum.

Wild Kale. *Brassica nigra.*

Black Mustard.

Found in fallow fields in August.

The stalk, about 3 feet in height, branches near the top, and is leafy; it is round, but flattened just beneath a joint, smooth, save for an occasional weak bristle-like hair, and of a shining light green color, becoming darker and tinged with purplish-red at the joints.

The lower leaves are deeply cleft into 5 or more lobes, the middle lobe being largest, with irregularly notched margins; the upper leaves are a narrow oblong shape, but slightly toothed; all the leaves are loose-textured, hairy underneath, and green, the lower ones having a yellow tint. They are set on stems, alternately, and at the spring of the branches.

The 4 petals of the small flower have slender bases, and spread their tips in the oblong-cross design which gives the family of Mustards its Latin name; their texture is delicate, and color a pure yellow; the pistil is green, with a yellow tip, and there are 4 yellow stamens; the 4 calyx-divisions are slender, greenish-yellow, and as long as the base of the petals which they hold loosely. The flowers form round club-like clusters, which prolong themselves as the blossoms mature.

The seed-pod is 4-angled, and tipped with the little tenacious pistil. These light and feathery flowers are seen to best advantage when, lifting their slender stems above the thickets that congregate in the lee of old buildings, they show their yellow against the weather-worn gray-lavender timbers. They love old cellar-holes also, and peep airily in at the blank windows of deserted houses.

WILD KALE : B. nigra.

Pepper-grass. *Lepidium Virginicum.*

Birds' Pepper (Neb.).

Found blooming inconspicuously from June to October, upon barrens and waste fields.

The often branching stalk is leafy above the first branch, though bare below, and grows from 6 to 24 inches in height according to its opportunities; it is slender but of a woody, tough fibre, and smooth; gray-green in color.

The narrow small leaf, with its tapering base, is only occasionally notched, and is of a dusty-green color. The leaves are set on the stalk alternately, and in little groups.

The very tiny unnoticeable flower has 4 thin, white petals, and 2 little stamens: the green calyx is barely visible. The flowers are set on thread stems, in loose, stiff, club-shaped and long clusters.

The most important feature of this plant is the seed; as the bloom moves upward it leaves behind a long stretch of maturing seed-pods, like little flat discs with a tiny notch at the top; a pungent flavor belongs to these pods, which is found acceptable by the cosmopolitan palate of childhood.

PEPPERGRASS: Lepidium Virginicum.

ROCK-ROSE FAMILY.

CISTACEÆ.

Rock-Rose. *Helianthemum Canadense.*

Frost Weed.

Found in bloom during June on dry open hillsides and pastures.

The slightly branching, leafy stalk, which grows from 12 to 15 inches high, is woody-fibred, and slender, and rough to the touch with short stiff hairs; it is red or tawny in color.

The long narrow oval leaf is pointed at both ends; its edge is slightly rolled under, and the ribs are prominent and rough beneath; the texture is strong-fibred, and the surface is rough; its green is tawny. The leaves are set on short stems, with a pair of wings ("stipules") at the junction with the stalk, and occur alternately.

The 5-petaled flower is shaped like a shallow cup of very fine and thin texture and a clear vigorous yellow color, which is in good harmony with the many orange-tipped stamens; the 5-pointed calyx is hairy, and its green is toned with tawny.

A very individual trait of this flower is the fact that the stamens almost always gather together to one side of the pistil, lying flat upon a petal, caused by the rude touch of a passing insect, it is said, so sensitive is this charming plant,—a quality further manifested by the swift fall of its petals if plucked. The flower never lasts more than a single day, and but few blossoms are borne on a plant. This is the first flowering of the Rock-Rose; though ripening the seeds now formed, there comes a second bloom in the fall whose blossoms are very small, with few or no petals, clustered in the angles of the leaves, and bearing but a few seeds. "Generally called 'Beauties of the Sun' by the ancients,—'Sun-roses' by the English folk."

ROCK-ROSE : Helianthemum Canadense.

VIOLET FAMILY.

VIOLACEÆ.

Sweet White Violet. *Viola blanda.*

Found in swamps, by roadside runnels, and in moist meadows, in April.

The leaves and flowers, on stems 4 or 5 inches in height, grow from the root.

The leaf is a round heart-shape, with a toothed margin, fine strong fibre, and smooth surface; in color, a light yellowish-green. The stem is slender.

The flower is small in all parts, the spur not conspicuous, the 5 petals much recurved and white, veined on the lower petal by reddish-violet hair-lines. It is set on a slender pale stem.

This is one of the earliest Violets, sweet-scented and graceful in growth.

SWEET WHITE VIOLET : Viola blanda.

Arrow-Leaved Violet. *Viola sagittata.*

Upland Violet.

Found in upland pastures in May.

The leaves and flowers, from the roots, are set on very short stems.

The leaf is arrow-shaped, with a blunt tip and slightly heart-shaped base; the margin is minutely notched, the upper surface, particularly, is softly downy, and the color is green, with a slight grayish bloom. The stem is flattened on its upper side and furnished with narrow margins.

The side-petals of the small flower are bearded, and the spur is small; the corolla is violet; the stem is hairy.

A small Violet, which grows close to the ground on high pastures, and puts forth few demands upon our attention.

ARROW-LEAVED VIOLET : V. sagittata.

Downy Yellow Violet. *Viola pubescens.*

Found in woods and moist shade, in May.

The branching, leafy, slightly angular stalk is shining near the foot, but hairy above, and grows from 5 to 12 inches high. It is light green. Near the foot a small sheathing leaf may be observed.

The leaf is large, usually broader than it is long, and varying in form from a round-pointed to a sharp-pointed shape; its ribs show plainly underneath, its margin is slightly notched, and the surface is soft and downy to the touch: in color, a clear green, lighter underneath. The leaves, on their long, grooved stems, grow alternately, with a pair of up-pointing little wings at the joint.

The lower petal of the flower is scoop-shaped, shallow and short, and notched into two scallops at the tip, with a very short spur; the 4 other petals are rounding and nearly equal in size. In color, a pure golden-yellow, with many dark markings on the lower petal, and fainter lines on the others. The single flowers grow on slender stems from the angles of the leaves.

The branches are wide-spreading, and the flower-stem springs away from the leaves with a decided gesture, nor does the Yellow Violet bend its head; the leaves are generally flat in manner of growth save for the little scoop at the stem. A few separate leaves on independent stems rise about the foot of the flowering stalk. This plant bears a profusion of blossoms, and continues to flower for a considerable time.

DOWNY YELLOW VIOLET : V. pubescens.

Canada Violet. *Viola Canadensis.*

Found in May, and again less profusely in August, in forests and woodlands to the north, or in high regions.

The branching, leafy stalk varies from 6 inches to 2 feet in height; it is smooth to the touch. Light green in color.

The heart-shaped leaf with its tapering point has a strong midrib, a slightly notched and wavy margin, and a thin, firm texture; it is a clear green color. The leaves, on stems, grow alternately, with a pair of little wings at the stalk; they are gathered close at the ends of the branches.

The small flower has an inconspicuous spur, its lower broadest petal is pinched sharply together in the middle at the edge, the other 4 petals are all long oval, the side petals are bearded and flaring, while the upper two turn back. The texture of the petals is fine and thin. This is a two-colored flower—the face of the corolla is white, while the outside is lavender or dark rich violet; the heart of the blossom is yellow-tinged, and its markings are in bluish-lavender lines. The 5-parted green calyx is possessed of a violet lining which it displays to the world by daintily turning back its uppermost tip. The flowers, on stems, spring from the angles of the leaves.

Sometimes the lavender facing of the petals is betrayed by a faint tinge of the color showing through their thin texture. This is an odorous Violet, and particularly pretty, with a kindly habit of blossoming a second time in the late summer,—a not uncommon custom in the family, but followed by no other member with such regularity and generosity of bloom.

CANADA VIOLET : V. Canadensis.

Running Violet. *Viola canina, var. Muhlenbergii.*

Dog Violet.

Found in May and June in light woods and along shady roads.

The small, round, leafy stems, from 3 to 7 inches high, are at first upright, but later send out creeping branches; they are smooth, and pale green.

The small leaf is rounding, and heart-shaped at the base, sometimes slightly pointed at the tip; the margin is faintly notched, the surface smooth, and the color light yellowish-green. The leaves, on short stems, are arranged in pairs, with long-pointed wings at the joint.

The flower is small: its spur rather long, the two side-petals bearded, and the color of the corolla pale violet, running into white at the base of the petals, the lower one being marked with fine lines of dark Violet; the tips of the stamens are orange; the 5-parted calyx light green. The flowers are set on slender pale green stems, and rise from the angles of the leaves.

This charming and profusely flowering Violet is invidiously nicknamed "Dog" by the English, because it is scentless.

RUNNING VIOLET: V. canina, var. Muhlenbergii.

Violet Family.

Common Blue Violet. *Viola palmata, var. cucullata.*

Meadow Violet.

Found in meadows and roadsides, among the grass everywhere, in May and June.

The leaf and flower stems vary in height from 3 to 6 or 7 inches.

The large heart-shaped leaf (1 or 2 inches wide at the base) is strongly ribbed, minutely hairy, and cut in rounded scallops along its margin; full green in color. The stem is half-round, and grooved on its flat side.

The 5 petals and the spur of the flower are variable in color from dark to light (rarely white), from blue- to red-violet; the bearded side-petals and the lower petal are white at the base. The flower-stem is long, slender and smooth.

The flower-stems are the length of the leaf-stems usually, or a little shorter, and the blossoms appear in the midst of the rich green foliage. In the new growths the lower edges of the leaves at the base are rolled inwards.

"This violet was taken from N. America to England in 1762, and in some English botanies is called *V. obliqua*."—Sir D. Wooster.

COMMON BLUE: V. palmata, var. cucullata.

Sand Violet. *Viola pedata.*

Bird-Foot Violet.

Found in May (later than the Meadow Violet) on dry banks and gravelly soil.

The leaves and flowers rise from the root on slender stems.

The leaf is deeply divided into 3 or 5 narrow and long parts, which are sometimes again cleft into 2 or 3 segments; the middle parts are notched by 2 or 3 rounding scallops, the side parts being shorter, with taper-pointed tips; the ribs show obscurely, the texture is thickish, and the surface is dull above and shining underneath; the color is a dull green. The leaves, on half-rounding stems, that are a darker-hued green than the leaves, spread widely. The early spring leaves are less often divided.

This is the largest of the Violet flowers, with 5 flat petals, the upper ones curling backwards on the stem, and a small, very flat spur; the texture is fine and close, and the color varies from deep red-violet to pale lavender, with a dash of white at the base of the lower petals, just beneath the green-tipped pistil, and dry tawny-orange stamens; the 5-parted calyx is pale green. The flowers are set on large shining, smooth stems, which bear a little pair of wings near the ground.

The Bird-Foot Violet flower does not droop, or nod, but holds itself out at an angle almost parallel with the stem; its bud shows white, and generally the paler lavender tints prevail in the full-blown flowers. Many folk-names are given this plant, which grows in little clumps and sometimes thickly spreads all over a favorably located sand-barren,—it is often found in burnt-over fields, and stump-lots. Its flowering season is not so long as many others of its family and as observed, it seldom blooms again in the autumn.

SAND VIOLET : V. pedata.

PINK FAMILY.

CARYOPHYLLACEÆ.

Field Chickweed. *Cerastium arvense.*

Found in May on dry and sandy banks.

The stalk branches a little for the flowers, and varies in height from 6 to 10 inches; it is rough with hairs, and green.

The small, grass-like leaves are rough-hairy, and green; they are set in pairs, joined about the stalk in a marked cup-like socket; the pairs occur at right angles to each other.

The small flowers commonly have 5 petals apiece, but sometimes the number is scamped and they are contented with 4 instead; each petal is so deeply cleft as to give the appearance of being quite divided; the texture is thin enough to show the veins, the outer surface is glossy, and the color is white; the calyx has as many sharp-pointed divisions as there are petals, and is green; the 10 stamens are pale straw-color. The flowers form little groups on long stems which spring from the angles of the leaves in pairs.

After the manner of the Pinks this nice little plant sets a blossom between the fork of the main stems.

FIELD CHICKWEED: Cerastium arvense.

Common Chickweed. *Stellaria media.*

Blossoming around dwellings in spring, summer, and autumn.

Its weak-fibred stem, lopping over the ground, is green, and smooth, with a barely visible little line of hairs down one side.

The small oval leaves have entire edges, and a smooth surface; they grow in pairs and are of a full green color.

The 5 white petals of the small flower are so deeply notched as to look like 10 very narrow ones; they are shorter than the 5 green calyx divisions; the flowers grow singly on short foot-stems, from the leaf-angles.

The Chickweed is a common plant of the dooryard, but without the usual obnoxious habits of a "weed,—" it is unobtrusive in demeanor, and, the roots having but a slight hold on the ground, is easily removed where undesired. It is a natural weather-glass, and can be trusted not to open its starry eye when rain threatens. The "Hen's Inheritance" is an English folk-name for this plant.

COMMON CHICKWEED : Stellaria media.

Long-Leaved Stitchwort. *Stellaria longifolia.*

Found blossoming in June, in the tall grasses of wet meadows.

This almost thread-like and weak-fibred stalk varies from 6 to 15 inches in height, and is branching and leafy, almost square, with somewhat roughened angles, and pale green color.

The long grass-like leaves are very taper-pointed at each end, thin, and smooth, and in color full green, paler underneath; they are set upon the stalk in pairs, at long intervals.

The flower is small; its 5 petals cleft so deeply as to give the appearance of double the number, very fine and delicate in texture, and pure white, the 5-parted spreading calyx being green, while the 10 silky thread-like stamens are white. The flowers, on long, slight stems, spring singly from the angles of the leaves.

A few-flowered fragile plant, with its tiny star-flowers and sparse flat leafage, this Stitchwort loves to grow among rank sedges and swamp grasses, from whose sturdy rectitude it may claim support and protection.

LONG-LEAVED STITCHWORT : S. longifolia.

Sand Spurrey. *Buda rubra.*

Found on sandy barrens in blossom during June.

This very modest little plant is seldom more than 2 or 3 inches high, with its single, round, slender, and smooth stalk of a light green color, with red rings at the leaf-joints.

The small narrow leaf is entire, flat, a trifle thick in texture, and dusty green in color. The leaves occur in pairs that box the compass around the stalk in little groups, and sit very close together; a dry sheath encircles the stalk at their junction.

The very small flower has 5 scoop-shaped petals, fine in quality, and pale lilac inclining to pink in color, and several pale yellow stamens; its 5 calyx-parts are sometimes longer than its petals and are hairy, and gray-green, with pinkish tips. Two or three flowers occur on the top of the stalk.

Only one flower opens at a time, but the calyx splits apart and shows the color of the petals a day before the bud opens. This smallest of the Pinks grows in such sociable crowds in sandy spots as to form a thick carpet, very pretty to discover when its close green is starred with its tiny flowers.

SAND SPURREY : Buda rubra.

Bouncing Bet. *Saponaria officinalis.*

Found on dry soil, by the wayside and in the fields, blossoming in July through September.

The large leafy stalk, which grows from 1 to 2 feet high, is stout, slightly rough, and noticeably enlarged at the joints. Its color is green, or more often a dark crimson.

The oval leaf, tapering at the tip, clasps the stalk at the foot; it is 3-ribbed and the middle-rib being a little short the blade is fulled to it on either side; it has a smooth surface, and is of a thick texture; the color is a grayish-green (usually dusty). The leaves are opposite in growth.

The flower is large, about 1 inch across, with 5 petals, broad and slightly notched at the top, and extended down into a narrow stem-like base, which is confined within the long cylindrical calyx; at the spread of the broad part of the petal are two little thread-like fringes. The color runs from white to pink, the 10 stamens are pale yellow, and the long, 5-notched calyx is a pale yellowish-green. The pistil divides at the tip into two curling spires.

Stocky and sturdy in growth, hearty and wholesome in nature, Bouncing Bet grows in great communities along the waysides, and railroad embankments; it is a little ragged in attire, owing to the habit the flowers have of drying up in the calyx. It looks its best under a gray sky.

BOUNCING BET : Saponaria officinalis.

Night-Flowering Campion. *Silene noctiflora.*

Gentlemen's Hats (N. H.).

Found along roadside thickets in July and August.

The sparingly leafy stalk branches in an angular fashion, and grows from 1 to 3 feet high; although stout, the branches are slender; it is round, hairy, and sticky to the touch; light green.

The large leaves are sometimes 3 inches long; near the foot they are oval in shape with a wavy edge, above they are long and narrow; the margins are entire, the surface hairy and gummy to the touch; green. They completely clasp the stalk and are united in pairs, the pairs being set at right angles to each other.

The 5 petals of the flower are deeply cleft; where they spread from the deep tube-shaped calyx, each is provided with a pair of little notched tags, which form a pretty crown about the throat of the flower; the texture of the corolla is thin and fine, and the color is pale pink, or white just tinted with rose; the pale, yellow-green calyx is 5-parted and elegantly ornamented with 10 branching ribs, or veins, of a darker color; it is sticky and hairy. The flowers are set on short stems in the angles of the leaves, in pairs usually, while a single blossom sits on a short stem, in the fork of the branches.

After blossoming the seed-box changes its shape to round, and becomes large, the calyx-tips folding together over its top, and the green pattern of the ribs showing more plainly. There is a faint sweet perfume about the flowers which may be only discovered at twilight or in a gray morning, for this is a night-blooming plant.

NIGHT-FLOWERING CAMPION : Silene noctiflora.

Deptford Pink. *Dianthus Armeria.*

Mountain Pink.

Found from July till frost-time, in upland fields and pastures.

The slender, angular and jointed stalk is from 8 to 12 inches in height, occasionally branching, round, smooth and shining. In color dark green.

The leaf is long and narrow, with a strong midrib, an entire margin, thin, tough texture, and a downy surface; in color it is rather a dark and cool green. The leaves, as with all the pinks, clasp the stalk in pairs with a noticeable joint; the pairs occur at right angles to each other.

The 5 petals of the small flower are oblong with finely notched tips; they spread widely, and are of a fine smooth texture, and a deep rose-pink color, dotted with pale pink specks; the green calyx is tubular, 5-parted, and downy, and is enfolded by 4 narrow green bracts. The flowers occur in pairs, from the angles of the leaves, on short leafy stems.

Sometimes, but not often, two flowers are borne on the same stem; it has been observed that the flower-stems are of about equal length with the curving leaves from which they spring. The plant grows in charming jerks and slants, and like all its kin is neatly finished at the joints. An October walk seldom fails to discover a few of these bright-hued Pinks amidst the dying meadow grasses and bare growths of summer; if the seeds are then gathered and spring-sown in the home garden this hardy little plant will consent to cultivation.

DEPTFORD PINK: Dianthus Armeria.

ST. JOHN'S-WORT FAMILY.

HYPERICACEÆ.

Large St. John's-Wort. *Hypericum perforatum.*

Common St. John's-Wort.

Found from June to September, in broad sunlight or in shade, growing in dry or moist soil.

The branching, leafy stalk, 1 or 2 feet high, rather slender and smooth, is green in color.

The leaves are usually oblong, with a tapering point, but do not rigorously conform to any model; with entire margins and a thin texture, which if held to the light is seen to be perforated by tiny punctures. The color is a full green, and they are set on the stalk in pairs, the pairs being placed at right angles to each other.

The flower is sometimes $\frac{3}{4}$ of an inch in width, but more often smaller; the 5 petals are finely notched at the tip and along one side, their color is a strong yellow turning in maturity to tawny: the calyx is 5-parted and a light yellow-green modulating between the petal and leaf colors; the many yellow stamens radiate from the center. The flowers are set in leafy terminal groups.

This cheery neighbor to the Daisy and Yarrow, though spruce and pretty when freshly adorned with bloom, is, it must be confessed, a sad slattern, for it does not shed its withered petals but holds them, ragged and unkempt, among the newly opened flowers during the long season of its blossoming. The yellow of the unopened bud is of a noticeably fine quality.

LARGE ST. JOHN'S-WORT : Hypericum perforatum.

Lesser St. John's-Wort. *Hypericum maculatum.*

Found in damp, weedy thickets and fields, during July and August.

The slender, very round, fine-fibred stalk, from 12 to 18 inches high, is noticeably erect in gesture, and bears short angular branches. Its green is often tinged with a ruddy color.

The leaf is oblong, with an entire margin, and smooth, fine texture; the perforations are not conspicuous, and the color is a full green. The arrangement is in pairs.

The 5 petals of the small flower are sharp-pointed, thin, and yellow, faintly marked with black lines which show more strongly on the outside than on the inside of the corolla; the calyx is greenish and 5-parted. The flowers, on short stems, form terminal groups.

This little plant's habits are in marked contrast to its larger brother John, for it is as tidy in rolling up into tiny bundles its faded petals, as the other is careless of appearances. Though its flower is less conspicuous, the reward, when the plant matures, more than compensates, for as early as mid-July the upper surface of the leaves take on a beautiful crimson flush that mingles with the green of the underside, while the stalk becomes a slender wand of scarlet.

LESSER ST. JOHN'S-WORT : H. maculatum.

MALLOW FAMILY.

MALVACEÆ.

Common Mallow. *Malva rotundifolia.*

Cheeses.

Found from August till frost-time around dwellings and along waysides.

The lopping, large, round stalk, with many leaves, lies low upon the ground; it is slightly hairy, and green.

The large, rounding leaf is heart-shaped at the base, and is slightly lobed; the margin is notched with small round scallops, the ribs radiate from the base, and the surface is soft to the touch. The leaves, on their long, and short, rough stems (from 1 to 12 inches in length), are placed alternately. The color is a dark green.

The flower has a spreading bell-shaped corolla cut into 5 long points, with notched tips; it is in color a translucent pinky-white, faintly lined with pink. The calyx is 5-parted, and green; just beneath the calyx occur 3 line-like bracts. The flowers, on their slender foot-stems, grow from the angles of the leaves all along the stems, 3 or 4 grouped together.

The seed of this Mallow endears the plant to children by whom it is eaten under the name of "Cheeses"; it is pretty to look at, being round, and light green, and enfolded by the 5 green tips of its calyx-cup.

> "Sitting down when school was o'er
> Upon the threshold of the door,
> Picking from mallows, sport to please,
> The crumpled seed we call'd the cheese."
>
> —*Clare.*

COMMON MALLOW : Malva rotundifolia.

GERANIUM FAMILY.

GERANIACEÆ.

Cranesbill. *Geranium maculatum.*

Wild Geranium.

Found in lush grass, or light shade, in fields and roadside banks, during May and June.

The stalk, single at first, but presently parting into twice-forking branches, is from 10 to 18 inches in height, and leafy above the branches; its surface is hairy, and color yellow-green.

The large leaf is 3- to 5-times divided with sharp-pointed tips, an irregularly toothed margin, distinctly showing ribs, hairy surface; yellowish-green in color. The leaves are set on stems in pairs, or near the flowers are placed close together and immediately upon the stalk. The size is variable, but often quite large.

The flower has 5 rounded petals that are somewhat bearded at the base; their texture is so fine it plainly shows the veins, the surface is very smooth, their edges slightly curve, and the color is a delicate pinkish-lavender; the calyx with its 5 needle-pointed tips is hairy, and light green; the 10 long stamens are spreading, and the pistil is 5-parted. The flowers, on short stems, are set in pairs, or in a loose, leafy terminal group.

At the joints of the stems are a pair of leaves and several tiny leafkins. Though set in occasional pairs the blossoms open one at a time. It is noticeable that the flowers which open in cool weather, or in a shady place, are almost crimson in hue, the color being always very variable. The leafage is especially brilliant in autumn, and sometimes as early as July a leaf will be found turned to a vivid scarlet-red. The curious and decorative seed-vessel gives the plant its fantastic folk-name.

CRANESBILL : Geranium maculatum.

Geranium Family.

Herb Robert. *Geranium Robertianum.*

Found on moist and shaded banks; in chief profusion of bloom from June to November, though stray flowers may be found in every month of the year save February.

The widely branching, leafy stalk, from 3 to 18 or more inches in height, is very slender and apparently weak-fibred, and covered with soft whitish hairs; it is red or crimson, green only when newly grown.

The leaf is thrice (and sometimes again) divided, with a triangular spread to its shape; the margin is cut into little rounded notches, each with a pointed tip; it is very thin in texture, and downy with hairs; a strong vigorous green in color. The leaves are on long slender stems, in pairs and groups.

The small urn-shaped flower has 5 wedge-shaped petals, of a delicate thin texture, and a violet-tinted rose color, rather deep in hue, and marked with paler lines; the pistil is rose color, the 10 stamens brownish. The 5 divisions of the hairy calyx hug the petals closely, and turn their sharp little tips out under their curve; it is pale, with green veins and margins. The flowers, on their slender stems, are set in pairs, terminally and along the stalk,—but one of the pair comes into bloom at once usually.

The stalk, with all its remarkable vitality, is weak at the root, and the plant is forced to lie somewhat upon the ground or rest against its sturdier neighbors. It takes kindly to indoor potting, and will bloom freely through the winter if kept in a cool place.

HERB ROBERT: G. Robertianum.

Ladies' Sorrel. *Oxalis corniculata,*

Yellow Wood Sorrel. *var. stricta.*

Sheep Sorrel.

Found in gardens and moist woodlands from June to October.

The branching, leafy stalk, about 6 or 8 inches in height, is smooth, silky with hairs when newly grown, and a clear, light green color.

The leaf is compound, with 3 broad, short, heart-shaped leaflets, that are somewhat folded on the midrib, and are thin, delicate, smooth; a clear green, paler underneath. The leaves, on their long slender stems, are alternately arranged.

The 5 spreading petals of the small flower are delicately thin, and show the veins faintly: they are a bright clean yellow, while the 5-parted shallow calyx is green; the 5 long and 5 short stamens which are joined together at the base are yellow. The flowers are arranged in a group of 2 to 6 on a long, light green stem, that springs from the angle of the leaf-stem and is generally of the same length.

Bud, blossom, and seed-pod may often be seen together on this plant, as is common to such a prolonged season of bloom. The pod is 5-sided, somewhat fuzzy with down, and bright green. Though hard to uproot, as the gardener knows, because of its underground runners, the plant is weak and apt to flop. The leaflets close entirely upon their midribs at night; their juice is slightly sour, and relished by children, who detect in its acid taste a sufficient resemblance to the Red Sorrel (*R. acetosa*) to warrant the folk-name given this oxalis.

LADIES' SORREL: Oxalis corniculata, var. stricta.

Jewel-Weed. *Impatiens fulva.*
Spotted Touch-me-not.
Lady's Ear-Drop.
Balsam.

Found in moist and shaded places from July to September.

This large, branching, leafy plant, from 1 to 3 or 4 feet in height, is weak-fibred and juicy; its stalk is slightly ribbed, and swollen at the joints, very smooth, and a pale reddish-green.

The large oval leaf, with its tapering tip and broad base, has a wide midrib, a coarsely toothed margin, and a thin, weak texture; the surface is dull, and pale green, with irresolute flecks of red near the edges. The leaves are alternately placed, on short pale stems.

The curious flower consists of a deep cornucopia-shaped pocket terminating in a slender hook-like spur, and 5 petal-like parts; the texture is fine and smooth, and in color it is orange or red-orange, thickly speckled with tawny-red dots, except the small curving side-parts which are less strong in hue, and even tinged with green; the 5 stamens are gathered in the mouth of the pocket, beneath the stem. The flowers swing on slender foot-stems in small groups.

Like all very juicy plants this wilts quickly when plucked. In bud the wing-like side-parts enfold the pocket. When ripe the seed-pods burst with a sudden snap that throws the seeds to a considerable distance; to this trait, and to the singular shape of the flower, are due the particular favor in which children hold the plant, and afford occasion, also, for the many by-names by which it is called, such as Snap-Weed, Silver-Weed, Lady's Slipper, Lady's Pocket, and Kicking Colt.

Pale Touch-me-not (*I. pallida*) is a light lemon-yellow variety, very like *I. fulva*, though the pocket of the flower is shorter, the spur less curved, and it is not so numerously spotted.

JEWEL-WEED: Impatiens fulva.

HOLLY FAMILY.

ILICINEÆ.

Black Alder. *Ilex verticillata.*

Winter Berry.

Christmas Berry.

Found in moist wayside thickets, and on the borders of small streams; the inconspicuous flowers opening in June and July, and the bright berries ripening in October.

This shrub is from 3 to 5 or 8 feet high, and has a round, tough stem, covered with a smooth dark gray bark.

The small oval leaf, tapering at both ends, is thin, and smooth above, but slightly woolly on the ribs beneath; the color is a strong, full green.

The small, inconspicuous flower has 4, 5, 6, and sometimes 7 or 8, small rounded divisions, and an equal number of tiny stamens; these pale, greenish flowers are clustered close to the stem, in the angles of the leaves, on the ends of the branches.

The bright red berries, about the size of a small pea, glow under the green leaves in early October, and later, among the gray twiggery they are like coals of fire.

BLACK ALDER: Ilex verticillata.

STAFF-TREE FAMILY.

CELASTRACEÆ.

Climbing Bitter-Sweet. *Celastrus scandens.*

Staff-tree.

Roxbury Waxwork.

Found beside walls and in open woods, in June; growing often in damp soil.

This clambering and twisting vine grows to considerable proportions; its stems are very tough, and the bark is firm and close, somewhat shining, and dark gray with occasional bronzy flecks.

The oval leaf, with its many noticeable ribs, finely toothed margin, and fine texture, is short-stemmed; its color is a cool green, lighter and shining underneath. The arrangement is alternate.

The greenish-white flowers are small and inconspicuous, their parts all in fives; they are gathered in loose terminal clusters, which give no promise of their brilliant fruiting.

With the autumn ripening of the seed, the dry round case becomes red-orange in color, and bursts into 3 divisions, which curl backward, with many twisting curves, to display the glistening coral-red fruit. The drooping clusters of gorgeous orange and scarlet berries keep their color long, and if gathered just before the seed-cases open, will last all winter for house decoration.

CLIMBING BITTER-SWEET : Celastrus Scandens.

BUCKTHORN FAMILY.

RHAMNACEÆ.

New Jersey Tea. *Ceanothus Americanus.*

Red-Root.

Found on dry banks and in thicket growths, blossoming in July.

This is a widely branching, very leafy bush, woody-fibred and tough, which grows from 2 to 4 feet high, and has a coarse, roughish bark, slightly grooved, and dull bronzy-green in color.

The oval leaf is sometimes heart-shaped at the base, the veins are hairy beneath and the margin is irregularly and slightly toothed with fine points; the texture is loose; it is downy to the touch, and dull green. The leaves are set alternately on short reddish stems.

The tiny flowers have 5 very slender petals, and are a pinkish-creamy-white; they are set on white thread-like foot-stems, and gathered in close thimble-shaped clusters, upon long stems which form terminal groups. They have a faint sweet odor.

In some localities this thickly blooming shrub is much infested with insects. The flowers fall quickly, but the pretty little silvery seed-vessels are retained through the second season.

NEW JERSEY TEA: Ceanothus Americanus.

VINE FAMILY.

VITACEÆ.

Virginia Creeper. *Ampelopsis quinquefolia.*

American Ivy.

Found on rich ground, in woods and wayside thickets, blossoming in July.

This is a high-climbing vine, with tough, woody-fibred stems, covered with a rough reddish-gray bark.

The large leaf is compound, with the 5 leaflets starting from the same point; the leaflet is taper-pointed, notched on the edge, smooth, shining, of a thin texture, and dark green color. The leaves, alternate in growth, are set on foot-stems 2 or 3 inches long.

The flowers are small, and inconspicuous, with their parts in fives and of a yellowish-green color; they grow in irregularly branching clusters from the angles of the leaves.

The round blue-black berries, on thick red stems, ripen in October. The leaves turn a vivid scarlet, which flames out among the autumn colors. The vine climbs by the aid of tendrils which terminate in flat sucker-like discs. It is easily transplanted and often seen around dwellings.

VIRGINIA CREEPER: Ampelopsis quinquefolia.

MILKWORT FAMILY.

POLYGALACEÆ.

Flowering Wintergreen. *Polygala paucifolia.*

Fringed Polygala.

Found in light woods during May.

The single stalk is flattened beneath the leaf, from 3 to 5 inches in height, and slender. It is smooth, and strongly tinted with purple, even with crimson, at the foot.

The lower leaves are small, clasping, and alternate; the upper are on stems, and form a terminal cluster of 4 or 5 around the flowers,—they are oval, with an entire margin, and a thick texture, smooth, and glossy green.

The irregular-shaped flower, like a gayly colored fly, has a very delicate and fine texture, and is of an exquisite clear crimson tint, the one fringed petal being white, tinged with a light yellow-green. From 1 to 3 flowers, on their green stems, form a terminal cluster.

These flowers are the idle beauties of the plant; the unnoted homely Cinderella flower, very small, misshapen, and dull, that sits down in the dust on a little side-stem close to the root, bears the seeds. The leaves last over winter, turning a rich crimson-bronze hue, almost as brilliant as the flowers; the fresh leaves are simultaneous in growth with the blossoms, unfolding as the buds swell. White varieties are occasionally found.

FLOWERING WINTERGREEN : Polygala paucifolia.

Milkwort Family.

Milkwort. *Polygala sanguinea.*

Found in moist sandy soil, in September.

The little wiry stalk, which branches near the top for the flowers, is 6 or 8 inches in height, grooved and twisted, and green in color.

The line-like leaf, with its blunt tip, and entire margin, is somewhat thick, and its green color carries a hint of crimson. The leaves are alternate, near together, and clasping.

The very small yellow petals of the flower are hidden within the calyx, two parts of which are larger than the others, and colored crimson. The flowers are so placed in a close cylindrical spike that these crimson calyx-parts are on the outside, overlapping each other in rows like tiles. These crimson spikes are on long stems that grow terminally, and from the angles of the leaves.

The flowers bloom in a single row at a time at the bottom of the spike, which prolongs itself as the buds unfold; when the seeds ripen the lowest rows fall successively, leaving the brownish stem closely beset by the little withered foot-stems of the blossoms.

MILKWORT: P. sanguinea.

PULSE FAMILY.

LEGUMINOSÆ.

Wild Lupine. *Lupinus perennis.*
Old-Maids' Bonnets.
Wild Pea.

Found in barren sandy fields, in June.

The tough, woody-fibred, round stalk is about 1 or 2 feet high, erect and leafy, with a rough, hairy surface. The color is light green, with a considerable showing of red.

The leaf is divided into 5 to 15 long narrow leaflets which radiate from a common center ("palmate"), each showing a strong midrib, with an entire margin; the texture is thin, and fine, and pleasing to the touch; the color is a soft green, paler underneath, showing a hint of red at the edge, the tip, and again at the stem. The leaves are set on stems, and arranged in little groups alternately.

The flower has 5 petals: the upper is broad, erect, and much folded back; the side petals are closed about the lower petal, which is not observable until the blossom is ready to fall, when it pushes itself, and the stamens, forward. The upright petal is a deep beautiful red-purple or dark violet, the side petals are violet, lined with blue, the lower petal is tipped with purple; the calyx is 2-parted and green. The flowers, set on short red-purple stems, are arranged loosely in a long terminal spike. The blossom is odorous.

In bud scarcely a trace of the purple tint shows, petals and calyx being pink and greenish-white,—even when the upright petal first turns back, only a few dainty flecks of dark color may be discerned; with maturity the purple and blue increase in depth. The blossoms at the base of the spike begin to open earliest. Not the least of the Lupine's attractions is the graceful curve of the stalk,—rarely is the flower-spike stiffly erect. It is a communistic plant, spreading all over a sand plain and making it a field of blue in blossom time, the roots buried firmly and to a surprising depth in the loose soil.

WILD LUPINE : Lupinus perennis.

Vetch. *Vicia Cracca.*

Tare.

Found along the borders of thickets, and in fields among grasses and grains, in June and July.

The climbing, leafy stalk grows from 1 to 2 feet high; it is tough-fibred, and much grooved with fine lines. Color, green.

The compound leaf is composed of 20 or more side leaflets, and terminates in a tendril; the leaflets are small and narrow, and are tipped with little needle-like bristles; the surface is finely downy. The leaves, on very short stems, are alternate and clasping by a pair of half-arrow-shaped wings. The color is grayish-green.

The flower is small, and shaped like the bean blossom; its color is a fresh, light, bluish-violet tint, the broad upper petal being faintly lined with darker violet; the calyx is unequally 5-parted, and colored like the corolla. The flowers are densely crowded in long, one-sided curving spikes that grow from the angles of the leaves.

The leafage of this plant affords a good example of the refined green generally found accompanying flowers of a blue or violet hue; its stalk is perhaps a little awkward in gesture, but not so the flexible curving flower-clusters. It grows in communities, and seen from a little distance forms a beautiful mass of blue.

VETCH : Vicia Cracca.

Wild Indigo. *Baptisia tinctoria.*

Found in dry sandy soil in uplands and light woods, blossoming in June and July.

The round stalk, from 2 to 3 feet high, is tough-fibred, and extremely smooth; color, green.

The leaf is divided into 3 small wedge-shaped leaflets, tapering at the base; it has an entire edge, a smooth and very fine surface, of a rich, dark gray-green color. The leaves are alternate, on very short foot-stems.

The corolla of the small pea-shaped blossom is of a clear yellow color, with a light green calyx. The flowers, on short curved stems, grow along the ends of the branches, in slender, elongated clusters, or spires,—the clusters sometimes branch, and are sometimes leafy.

Both the flower and leaf in withering turn black. The plant is attractive in its leafage, which is fine in quality and rich in color; when growing in the open it has a round, compact, bushy top, and a general air of trigness, often unnoted under less favorable conditions.

WILD INDIGO: Baptisia tinctoria.

Wild Senna. *Cassia Marilandica.*

Found in rich ground by the wayside, in July and August.

The smooth, tough stalk, growing from 3 to 4 feet high, is light green in color.

The compound leaf has from 6 to 9 pairs of narrow oblong leaflets; the midrib of each leaflet extends a little beyond the margin at the tip of the blade; the surface is smooth, and the texture firm and fine. The foot-stems of the leaves show the gland-like swellings frequently seen in members of this family. The leaves are alternate, and green in color, tending toward yellow-green, lighter beneath.

The flower has 5 slightly unequal petals, 3 standing close together, and 2 spreading more widely, while the calyx has 5 long divisions turned backward; there are 10 stamens in 3 sets—one set of 3 is short and rounded at the tip, a second set of 4, opposite the first, is somewhat longer, while the third set of 3 is longer still. The petals and stamens are of a rich soft yellow, the latter being tipped with a very dark brown, while the calyx is a fine greenish-yellow. The blossoms are in loose clusters, on short flower-stems, from the angles of the upper leaves.

The fineness of texture, and the quality of color, accentuated by the irregular dashes of dark of the stamen-tips, give to the Wild Senna the distinguishing air of "style." The leaves seem slightly sensitive to the touch, and inclined to droop with much handling.

WILD SENNA : Cassia Marilandica.

Wild Pea-nut. *Amphicarpæa monoica.*

Common in rich, open woodlands and damp wayside tangles, usually blossoming in August and September.

A vine: climbing over low vegetation by aid of its slender, twining, green stem.

The 3 leaflets of the compound leaf are very broad across the middle, especially the middle one, which is almost diamond-shaped: the margin is entire, the surface almost smooth, and the texture exceedingly thin; at the juncture of the foot-stem with the blade, and with the main stem, are small gland-like swellings; the alternate leaves, on slender stems, are of a light yellowish-green.

The slender pea-shaped blossom is lavender-tinted, with a pale green 4- to 5-notched calyx; the flowers grow in groups of from 4 to 7, on the end of a short flower-stem, that springs from the angle of the leaf.

The flowers occasionally ripen pods about 1 inch long, holding from 3 to 4 brown-mottled, bean-like seeds. The vine is said also to form subterranean seeds from rudimentary flowers, the seed being enclosed in a fleshy, pear-shaped pod; this perhaps may have been thought a good reason for giving to a slender and well-behaved little vine the opprobrious folk-name of Hog-Pea-nut! But those who know its true character will never degrade it to so low a level!

WILD PEANUT: Amphicarpæa monoica.

White Clover. *Trifolium repens.*

Found in chief profusion in June—though continuing to flower through the summer,—amidst grass, along the roadsides, and occasionally in woodland glades.

The creeping stalk sends up its erect leaf and flower-stems (of 3 to 6 inches height) in great profusion. It is green and pale.

The leaf is compound; the 3 leaflets are oval, slightly notched, or heart-shaped, with obscurely toothed margins; of fine texture, and smooth surface. In color it is a rather dark, cool green, sometimes faintly marked with a triangular band of lighter color on each leaflet.

The upper and larger petal of the little flower is slightly turned back; the color of the corolla is white, the small 5-parted calyx being green. The flowers, on their very tiny foot-stems, are gathered in a close, round head, which is set on a slender, light green stem that springs from the stalk.

As the flowers mature they turn downwards from the head; the trefoil leaf is of especial elegance in shape and color. Roadsides and lawns thickly strewn with these pretty Clover heads, sweeten the air with the wholesome grass-like fragrance of their odorous flowers,—they are beloved by bees.

WHITE CLOVER : Trifolium repens.

Alsatian Clover. *Trifolium hybridum.*

Alsike.

Found in June and July, in meadows and fields.

The stalk (from 8 to 12 inches in height) is branching, leafy at intervals, and curving in growth; it is slender, round, and finely grooved. Color light green, speckled with dull crimson.

The leaf is compound, the 3 leaflets small and narrow; the margin is finely notched, the texture delicate and smooth to the touch; the color is a cool light green, with no clover-markings. The leaf is set on slender grooved stems, with a pair of flaring wings at the junction with the stalk; the arrangement is alternate.

The small flower is very like the White Clover, but tinted a beautiful rose color. Set in a loose, small, round head, on a terminal or side stem.

When advanced in age the lower flowers of the head turn downwards, after the manner of the White Clover, which it closely resembles except for the color. It is honey sweet in perfume.

ALSATIAN CLOVER : T. hybridum.

Crimson Clover. *Trifolium pratense.*

Found, from June to September, growing in meadows, fields, and waysides.

The stalk (from 6 to 15 inches high) is rather large, branching, leafy, strong-fibred, grooved slightly, and roughened by the presence of short hairs. Color, light green.

The leaflets are 3, of varying shape, oval, long oval, or heart-shaped; the margin is slightly irregular, the texture thin; the color is a fine cool green, lighter underneath, and the upper surface of each leaflet is marked with a pale triangular patch in the middle. The leaf is set on a slender stem, with a pair of bristly-pointed, woolly, green and white, membrane-like wings at the junction of the stalk; the arrangement is alternate.

The corolla is large, its upper petal narrow and erect: in color, all shades of crimson to a violet tint. The 5-parted calyx has long thread-like feathery tips; it is light green. The flower-head is large, close, and round or oval; it is set on a terminal or side stem. Beneath the head, like a collar, are found 3 membrane-like leaves.

The violet-crimson flower-head is modified, by the green calices, into excellent harmony with the fine cool green of the leafage.

CRIMSON CLOVER : T. pratense.

Yellow Clover. *Trifolium agrarium.*

Hop Clover.

Found, during June and July, in dry fields and waysides.

The stalk branches slightly, and is leafy; it is slender, round, and smooth, and grows from 6 to 12 inches high. The color is light green.

The 3 leaflets of the compound leaf are long and narrow, with an exceedingly fine texture and smooth surface. The leaves, on very short stems, are placed in groups, or singly and alternately, upon the stalk; at the base of the stem, and uniting with it for half its length, occur a pair of enfolding wings.

The flowers are very small, and gathered into a close head, that is set on a little stem growing from the angle of a leaf; the corollas are yellow, the minute calices being green.

The flowers open from the bottom of the head upward, the mature blossoms becoming dry and husky, and turning down after the manner of the hop, as the bloom continues towards the summit; the heads thus show a harmonious gradation of color from brownish-yellow at the base, through yellow, to the yellow-green of the buds at the top of the head. The plant often grows in clumps of a considerable size.

YELLOW CLOVER : T. agrarium.

Stone Clover. *Trifolium arvense.*

Rabbit-Foot Clover.

Pussy Plant.

Found in August and September; growing in poor, dry soil.

The slender, branching stalk varies from 4 to 10 inches in height, and is smooth, or slightly rough, and light green.

The leaf has 3 long, narrow, and blunt-pointed leaflets,—their midribs conspicuous to the very tips; the margin is entire, the texture fine and downy to the touch, and the color is a rather light green. The leaves, on short stems, are arranged alternately and near together.

The small, greenish-white corolla is shorter than the calyx, which is long, and green, with 5 feathery tips that are rose colored and give to the head its peculiar gray-pink hue. The flower-heads are oblong; 2 or more are found on a branch.

A faint perfume belongs to the newly opened flowers. Doubtless the children's name, "Pussy Plant," points to the resemblance the silky, green-rose head bears to the pussy-willow catkins.

STONE CLOVER: T. arvense.

Nonesuch. *Medicago lupulina.*

Black Medick.

Found, from July to September, in dry soil and barren fields.

The little stalk, frequently about 6 inches high, is apt to lie upon the ground, and is zigzag or twisted in manner, or occasionally curving; it is slightly rough, and downy near the top. In color green, rusty, and pale near the top.

The parts of the 3-divided leaf are long-oval, broadest at the notched tip, which is further marked by the sharp little projection of the midrib beyond the slightly irregular margin; the surface is rough to the touch, downy when young; the color is a cool gray-green. The leaves, on slight stems, are arranged in groups alternately. A pair of sharp-pointed, notched wings clasp the stalk at the junction of the stem.

The small and delicate corolla is yellow; the minute calyx is green. The flower-head is small and round; on a slender terminal or side stem.

When the seeds ripen the pods swell large and bean-shaped; they turn dark, almost black, and are woolly to the touch; each contains one round seed.

NONESUCH : Medicago lupulina.

Purple Clover. *Medicago sativa.*

Alfalfa.

Medick.

Lucerne.

Found, from July to September, in dry fields and sandy barrens.

The bushy, branching stalk reaches 2 or 3 feet in height; it is not very large, and is smooth; light green in color.

The 3 leaflets of the compound leaf are long and narrow, or a pointed-oblong shape, widest near the abruptly-tapering tip; the margin is very slightly irregular, except for a sharp little needle-point at the tip; the surface is downy. Each leaflet is provided with a tiny foot-stem, the middle having the longest one. The color is a cool green, lighter underneath; without markings. The leaves are set on slender stems, arranged in groups, alternately; a pair of slender, fine wings occur at the junction of the stalk.

The flower is smaller than that of the Crimson Clover; it has a fine texture, and the petals are a pure purple color, the upper petal, which is much curled back, being marked with delicate dark lines; the small calyx is pale green. The flower-head is a short and club-shaped spike.

An individual trait is the charming little jerk in the line at the spring of the central leaflet.

PURPLE CLOVER : M. sativa.

Tick Trefoil. *Desmodium nudiflorum.*

Found on sandbanks and in dry shade in July.

The root sends up a flower-stem, pale, slender and about 2 feet in height, and a stout, woody leaf-stem which is shorter, and gray.

The 3 leaflets of the compound leaf are broad-oval, entire, with many ribs and veins showing in the thin, somewhat papery texture, that is rough and dry to the touch; the color is grayish-green, paler underneath. Three or four leaves on their long strong stems are close set, one above the other, in an apparent whorl upon the summit of the short stem already described. Leaves occur also upon the flower-stems.

The flower is small; the upper petal is notched at the tip, and much turned back; the 4 others are caught by thread-like bases in the shallow 5-parted calyx; they are a clear lilac and white, the upper petal being marked with two purple patches; the calyx is pale reddish. The flowers on red foot-stems are arranged in little groups in a long spire upon the long stem which rises from the root.

One flower only blooms at a time. A tiny pointed leaf, or bract, as long as the calyx, is folded over the bud, but falls when the petals expand.

TICK TREFOIL: Desmodium nudiflorum.

Wild Bean. *Apios tuberosa.*

Found on moist banks, among tangles of low bushes and sedges, in August.

This is a twining vine, leafy, rather slender, and slightly rough to the touch. In color, green, sometimes tinged with a dull red.

The leaf is compound, usually of 5 or 7 leaflets: these are oval, largest at the base, and tapering to the tip; the margin is entire, the fibre strong, and the surface slightly rough; color, a strong, full green. The leaves are alternate at intervals, springing from a strong joint.

The upper petal of the flower is broad, and hood like, the middle folded petal is like a beak beneath it, the side petals narrow and hanging like ribbons to tie the hood. Its color is brown-pink, the hood and beak darkest on the inside. The flowers are clustered together in a dense rounded head, set on a short stem that springs from a leaf-joint.

The front view of this flower carries out the fantastic suggestion of the hood shaped petal, for the beak looks like a strongly hooked nose far under its shadow. It is odorous.

WILD BEAN: Apios tuberosa.

ROSE FAMILY.

ROSACEÆ.

Choke Berry. *Pyrus arbutifolia.*

Found in wooded lands during April and May.

This small, branching shrub grows between 2 and 5 feet in height; it is woody-fibred, and the bark is reddish-gray in color.

The leaf is small, and oval, with an abruptly pointed tip, tapering to the base, the margin being finely toothed, with a smooth and shining surface. Its color is dark green. The leaves, on short stems, are placed alternately.

The 5 round petals of the flower have little claw-like bases, and are white in color; the many stamens are also white, with light red tips; the pistil is 5-parted. The flowers are set on light green foot-stems, and arranged in almost flat-topped clusters from the ends of the branches.

This neat and tidy looking leaf always shines as though just washed in dew. The pretty flower-clusters resemble plum blossoms.

CHOKE BERRY : Pyrus arbutifolia.

Wild Strawberry. *Fragaria Virginiana.*

Found during May and June in pastures, and fields, and copse-borders.

The leaf and flower stems, from 6 to 8 inches high, spring from the root, with dry sheaths enclosing them at the ground.

The leaf is compound, the 3 leaflets wedge-shaped; the margin is deeply toothed, and the many ribs show plainly; loose of texture, and roughened underneath with hairs. In color a rich strong green, paler beneath, sometimes reddish, or pink. The stem is hairy; green, and reddish near the foot.

The flower has 5 rounded petals with pointed bases; its texture is thin; pure white in color; the stamens many and orange-yellow. The petals are set daintily around the base of the little green cone, that later becomes the berry, showing the 5 broad divisions of the calyx between; just beneath the calyx, and alternate with its tips, occur 5 narrow bracts which lie so tightly underneath as to appear to belong to it. The flowers, on short foot-stems, are placed in groups on larger leafy stems, these forming a loose terminal cluster set on the hairy stem which rises from the roots.

After the petals fall, the calyx turns up its tips to protect the fruit, which droops, as it reddens and becomes pulpy. The young leaf, as it rises from the ground, is close-folded like a delightful little green fan; the first leaves often lie flat upon the ground, and are rusty in color. The Strawberry has a pleasant way of bursting into a flurry of bloom late in August; along wood-paths and unfrequented lanes one comes upon it as a belated bit of spring. He who has smelled the exquisite fragrance of the field strawberry fruit will not soon forget its wild charm.

WILD STRAWBERRY : Fragaria Virginiana.

Sweet-briar. *Rosa rubiginosa.*

Found in pastures during June.

This lovely, branching, leafy bush grows to be 7 or 8 feet high under favoring conditions, but is most often about 3 or 5 feet in height; its stalks and branches are large and strong, round, firm-fibred, and smooth, with frequent slender thorns which curve backward. In color, a full clear green when young, only dashed with red-bronze, but becoming red-brown when old. The thorns are highly polished, and of a strong red color when old.

The little leaflets, of the 3- to 7-divided leaf, are oval, with a prominent midrib (upon which they are occasionally creased); the margin is doubly notched, the ribs and foot-stems hairy with little prickles; the upper surface is soft to the touch, while the under is slightly sticky with a resinous gum, which yields a delicious aromatic perfume. The color is a cool and beautiful green. The leaves clasp the stalk with a pair of small fine-pointed wings ("stipules"); they are placed alternately, either singly or in groups, and close together.

The flower is composed of 5 heart-shaped petals, curving like a shell, of an exquisitely delicate texture and smoothness; their color a lovely creamy-rose tint. The stamens are many, curling, and pale straw color. The calyx is 5-parted, the spreading tips notched 3 or 5 times; they are smooth, with a velvet lining which is tinted a very pale creamy-green, while the outside of the calyx is bright green. The flowers are set in groups on little twigs, and scattered profusely along the stalks.

When the flower opens, the calyx-tips turn back. The haws are large, and of a brilliant coral-red color which they retain through the winter. The sturdy young shoots, which grow rapidly, are thickly protected by long bristles of a rusty red color. An element of beauty, in the growth of this most perfect rose, exists in the free curve with which its branches bend downward their wreaths of bloom. The odor of the leaves is like that of green apples.

SWEET-BRIAR : Rosa rubiginosa.

Pasture Rose. *Rosa humilis.*

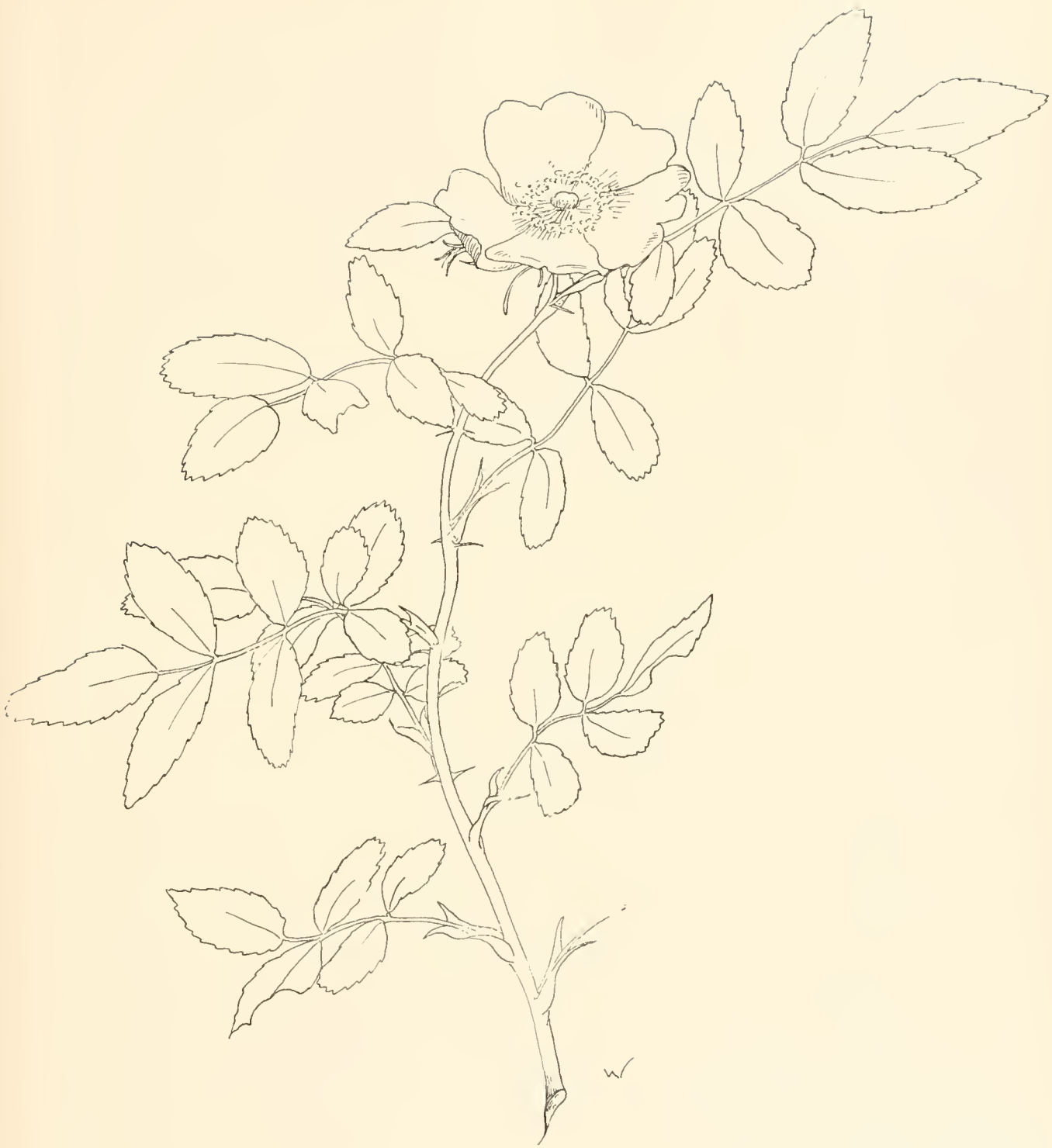
Found on rocky hillsides, and in dry thickets, during June or July.

The branching, leafy stalk is rather slender, firm-fibred, and smooth, and grows about 2 or 3 feet high; its spines are occasional, short and fine, and either straight or slightly down-curved,—they occur also in pairs at the base of the leaf. In color green, with, or without, bronzy-red streaks.

The leaflets, 3 to 7 in number, are a long-oval shape,—frequently narrow,—sharp pointed, with an irregularly toothed margin, a thin, firm, close texture, the ribs bristly underneath. In color a fine rich green. The leaves are alternately placed, and clasp the stalk with a pair of flaring, narrow wings ("stipules").

The petals are 5, heart-shaped, and shell-like, the texture is thin, showing the veins; color, a pure and delicate rose-pink. The stamens are short, many, and yellow; the pistils gathered in a small crimson center. The bright green calyx-divisions are 5, long and narrow, deeply and sharply cleft, covered with bristles. The flowers on leafy stems, are placed, terminally, or along the branches, in pairs, or singly.

The blossoms are odorous, and abundant,—their petals are beautifully curved. The plants grow in thick plantations, and are partial to upland pastures, where they contest their rights with the Hardhack, and Everlastings, and even crowd upon the red cedars and wild apple trees.



PASTURE ROSE ; R. humilis.

Smooth Rose. *Rosa blanda.*
Meadow Rose.

Found near meadow walls, and along fences, in June.

The stout, rather large stalk, branches a great deal and is very leafy; it varies from 2 to 4 or more feet, and is generally quite without prickles. The new shoots are green, tinged with pink, and show a slight bloom; the old growths (they become woody-fibred) are dark red.

The leaflets are 3 to 7 in number, large and often blunt at the tip, many ribbed, with noticeably toothed margins usually, and a grooved mid-stem. The color is cool green, rather dark, underneath white or pale with bloom. The leaf is set on a short stem, scarcely longer than the conspicuous wings, with which it clasps the stalk; these have pointed tips and are finely toothed, and are green, with a dash of red in the stem. The leaves are close together.

The flower is large and odorous, the 5 petals being broad and curving; in color a glowing rich crimson, pale near the center. The stamens are many, and yellow; the pistils gathered in a flat disc are green or nearly yellow. The calyx is very smooth, the divisions shorter than the petals and downy within; it is a bright clear green. The flowers are set singly, or in groups. The foot-stem is short; midway it bears a pair of pointed leafkins, and at its junction with the stalk a pair of large, oval, toothed leaf-like wings occur.

For profusion of bloom this is a good variety in cultivation, to which it takes kindly, since it remains vigorous and free from blight when its paler sisters show their longing for their old wild life. The hips are large and red. Bristles are sometimes found on the new shoots.

MEADOW ROSE : R. blanda.

High-bush Blackberry. *Rubus villosus.*

Found in roadside thickets in early June.

This large, stout, stalk varies from 2 to 6 feet in height; it branches toward the top, is round, and grooved, and armed with strong recurved thorns; the new shoots are furnished with short, coarse hairs. The color in the old stalks is a vigorous russet-red, while the young growths are green.

The leaf is divided sometimes into 3 leaflets and sometimes into 5, each leaflet being set on a short foot-stem with the end one a little longer than the others; the margins are coarsely toothed, the ribs deeply marked, the texture coarse, and the surface covered with short hairs; the stem and midrib are furnished underneath with small strong prickles. The color is a coarse, warm green. The leaves are placed alternately, with narrow leafy wings at the stalk.

The 5 oblong petals of the flower taper into a narrow claw at the base; the color is pure white; the 5, pointed, light green calyx-parts alternate with the petals; the stamens are many, thread-like, and tipped with dark brown, while the several pistils form a rounding, pale green bunch in the center. The flowers, on their light green stems, form large cone-like clusters on the ends of the stalks.

The old canes are noticeable in winter and early spring for their fine russet-red, as they grow in plantations on the hillsides and along the lanes; this strong red coloring comes out in the autumn leafage, dark and rich though subdued in hue, and is held late in the vigorous fibre of the leaf. The gracefully formed flower blooms in profusion, early, though the fruit is longer than the other Blackberries in maturing; the fruit-clusters add another attractive feature to the plant, which is known as "only a common Bramble."

HIGH BUSH BLACKBERRY : Rubus villosus.

Dewberry. *Rubus Canadensis.*

Running Blackberry.

Found in dry fields, banks, and roadsides in June and July.

The stalk trails and runs; it is leafy, stout, and woody-fibred, with few, and small, prickles. In color dark red.

The leaf is divided into 3, or 5, or 7 leaflets of an oval shape, the middle one generally being wedge-shape, and set on a short stem; the margins are sharply toothed. The color is a full, vigorous green.

The flower petals are 5, long, rounded at the tip and tapering at the base; in color they are pure white. The stamens and pistils are pale; the 5-parted calyx is a pale silvery green. The flowers grow singly, or loosely clustered in twos and threes.

The blossom of the Dewberry is sweet-scented, with a fragrance resembling that of the Anemone, or Adder's-tongue. Its berry has fewer, and larger grains, than the High-bush berry; when favorably developed it has a fine wild flavor.

DEWBERRY : R. Canadensis.

Running Swamp Blackberry. *Rubus hispidus.*

Found in swamp lands, grassy woods, and copse borders during June and July.

The trailing, rather slender, stalk runs on the ground in varying lengths; its prickles are few and weak. The color is green and brown.

The leaf is small, usually with 3 leaflets that are broad-oval or wedge-shaped; the margins are toothed, ribs marked, and the surface is smooth and shining, while the fibre is tough. The color is dark green.

The 5 small flower-petals are white; the stamens and pistils many, but inconspicuous; the calyx 5-parted, and pale green. The small clusters of two or three blossoms spring from the new shoots.

The fruit is scanty, and small. The pretty, dark, glossy, green leaves turn a rich dull bronzy-red in the fall, and remain so throughout snow-time,—they form a pleasing incident in the bouquet, gathered by the lover-of-the-woods-in-winter.

RUNNING BLACKBERRY : R. hispidus.

Purple Flowering Raspberry. *Rubus odoratus.*

Scotch-Cap.

Thimble-berry.

Found among wayside tangles, and uplands, in July and August.

The branching, leafy, stalk grows from 3 to 5 feet high; it is large, of a tough, woody-fibre, and the surface is roughened by short sticky hairs. The color is rusty green, and reddish-brown.

The large leaf in general shape resembles a maple leaf, with 3 or 5 lobes, a tapering point, and a toothed margin ; the ribs and veins form a strongly-marked network, the texture is loose, and the surface is somewhat rough. The color is a strong, full-toned, yellowish-green. The leaves are alternate in growth, and are set on long stems.

The large flower is rather like a Rose in appearance, with 5 large, rounded petals, and many light yellow stamens forming a ring around the center. The color of the freshly opened petals is a deep, bright crimson, becoming pale, and duller with time. The 5-parted, light green calyx is covered with small, sticky, red hairs, and the flower-stems are also sticky. They grow in loose clusters, from the ends of the branches.

On cool or cloudy days the blossoms show a deep clear color, not to be discerned on hot days which speedily change them to a light bluish-pink. The fruit resembles that of the red raspberry, though it is a much shallower cup shape; the plant continues flowering after the berries begin to ripen. The bush is large and shrubby in growth, with many leaves.

PURPLE FLOWERING RASPBERRY : R. odoratus.

Meadow Sweet. *Spiræa salicifolia.*

Queen of the Meadows.

Found in thickets, and along moist banks, during July and August

The bushy stalk bears many branches, and is very leafy; between 2 and 3 feet in height; it is round, strong and firm-fibred, and covered with a very thin, fine bark of a beautiful, glossy, golden-bronze hue.

The pretty leaf is oval, with a pointed tip, and finely notched margin; the ribs are prominent underneath, the texture is firm, the upper surface is smooth, while it is slightly rough underneath. In color it is a full green, lighter somewhat underneath, the midrib pale. The leaves are set on short up-springing stems, and the arrangement is close and alternate.

The small petals are 5 in number, shell-like, and pinkish-white; there are many rosy stamens; the calyx is small, 5-parted, and pale green. The flowers are set on thread foot-stems in little loose spires, that form a large, leafy terminal spire.

Like the Hardhack (*S. tomentosa*) the leaves turn upward, with a little arch in the stem; the central flower-spire blossoms first. The plant has a great elegance of line, and some of its details are admirable, such as the color of the stalk, and the especially pretty light brown seed-spires; the bark frequently splits into long shreds. The blossoms are fragrant.

MEADOW SWEET: Spiræa salicifolia.

Steeple-bush. *Spiræa tomentosa.*

Steeple-top.

Hardhack.

Found in open pastures, hillsides and lanes, during July and August.

The stalk bears prim branches, and is very leafy; woody-fibred, and strong, the surface being woolly. Pinkish-brown in color.

The leaf is oval, with a strong midrib, and a notched margin: the under surface is covered with wool of a whity-green color, the upper is full green in tone. The leaves, on scarcely perceptible stems, spring from the stalk with a strong and noticeable arch, which points them upwards; they are placed close together, and alternately.

The 5 petals are very small, round or slightly oval in shape, rosy-pink in color, as are the many stamens, which give a feathery look to the blossoms. The small calyx is 5-parted, and green. The flowers are crowded in small spires, that are arranged closely in a fine-pointed terminal spire, which is often 3 inches in length.

The flowers open first at the tip of the spire, which thus frequently turns to pale brown, before the light green buds at the base begin to swell. The ripened seed-spires of the previous year, dried to a rich gray-red, or deep brown, are retained during the flowering season, and add much to the attractiveness of the plant. The upturned undersides of the leaves are often tinted with pale rose color, as though reflected from the blossoming spire; all along the middle of the stalk they are larger than at the foot, or near the flowers. Upland slopes, which offer favoring conditions to the plant, take on a perce ptible tone of pink during the blossom-time because of its numerous presence,—it is unfortunate that farmers rate this gregarious habit as pestiferous.

STEEPLE-BUSH : S. tomentosa.

White Geum. *Geum album.*

Found along roads, and moist and shady thickets, from June to September.

The zigzag branching stalk varies from 10 to 18 inches in height, and bears few leaves; it is tough, coarse fibred, and rough with hairs; it rises from a foot-tuffet of leaves. Of a brownish green color.

The root-leaves are large, and 3-divided into round, unequal, parts, with a round-scalloped margin, that is often wavy; and set on long hairy stems,—along which are sometimes scattered other indeterminate little leaflets; the upper leaves are simple, and narrow, or deeply 3-cleft, with uneven sharp-notched margins, and set on long stiff stems, which clasp the stalk with a pair of 3-notched wings; a few small leaves near the flowers are set close on the stalk clasping with small narrow wings. The surface is hairy, texture loose, and coarse; the color a crude green; the arrangement alternate.

The flower has 5 petals, oval shaped, with fine-pointed bases; the texture is thin and delicate, the edges curly; clear white in color; the stamens are fine, tipped with yellow; the many green pistils are gathered in a small conical head; the calyx is 5-parted, and green, with white edges; between the divisions is found a tiny thread-like point. The flowers are set on slender, leafy stems, which are terminal, and from the angles of the leaves.

The petals are so widely spread that the calyx is seen, from above, as a fine-pointed green star; after they fall the head develops long, wiry, green hooks, with which to grapple the heedless traveller. The growth is angular, and weedy.

WHITE GEUM : Geum album.

Common Agrimony. *Agrimonia Eupatoria.*

Found in July and August, in shady copses, light woods, and thickets.

The small single stalk (from 1 to 2 feet in height) is dry fibred, and hairy. Green in color.

The leaflets are many, 5 to 7 usually, with small unformed leafkins irregularly placed between them upon the long stem; the leaflets are oval, and many ribbed, with toothed margins, of a loose texture, and hairy to the touch. The color is a strong green. The stem is hairy, clasping with a pair of flaring, toothed or entire wings. The leaves are alternate, and near together.

The small flower has 5 oval, short petals of fine texture, and a full yellow color; the many stamens are yellow with orange tips; the calyx is 5-parted, the divisions alternate with the petals, and of a strong green color. The flowers are arranged in a close round terminal spire.

When crushed the leaf exhales a faint spicy odor. The slender spire seldom holds itself stiffly erect, but bends and curves to one side, like a pretty green and gold plume; its seeds, round and rather flat, are sticky, and apt to go a' travelling without an invitation, with the footman.

COMMON AGRIMONY : Agrimoniam Eupatoria.

Five-finger. *Potentilla Canadensis.*

Common Cinquefoil.

Found, from May to July, about dwellings and in pastures, and light shade ; in sandy soil.

The root sends up a bunch of leaves, from which many long, slender, reddish runners spread ; they vary much in length.

The compound leaves are 3-divided, with an appearance of being 5-parted the side leaflets are so deeply cleft into 2 divisions ; the leaflets are wedge-shaped with noticeable ribs, sharply-toothed margin, thin texture, and downy surface. The color is a strong, full green, lighter underneath. The leaves, on long stems, rise from the root, or on very short stems are arranged along the running stems, in little groups, at rather long intervals apart.

The 5 heart-shaped petals of the flower are delicate in texture, and light pure yellow in color ; the calyx is 5-parted, the divisions alternate with the petals, and with the 5 narrow bracts which hug the calyx closely,—all these parts are hairy, and green. The flowers, on slender stems, spring from the angles of the leaves, along the runners.

Sometimes the stems lift themselves nearly erect, but more often they lie upon the ground, where occasionally they throw out roots from the tufted leaves, and so cover the earth with a pretty interlacing network of green leaves, and red stems.

FIVE-FINGER : Potentilla Canadensis.

Tall Cinquefoil. *Potentilla arguta.*

Found among tall grasses in fields and meadows in June.

The stout leafy stalk grows between 2 and 3 feet high; it branches for the flowers, and is stout, woody-fibred, and hairy to the touch. The color is a pale yellow-green, with red-brown hairs.

The root, and lower, leaves are divided into 3 to 11 long, oval leaflets, and are set on long stems: the upper leaves are 3-divided, and set on short stems which clasp the stalk with a pair of wings; the margin is toothed, ribs and veins being prominent, and the surface is downy with hairs. Green in color.

The flower has 5 petals, that are round with a pointed base, of a fine texture, and creamy-white color; the stamens are many, thread-like, and bright yellow; the yellow pistils are gathered prominently in the center. The calyx is 5-parted, and green; close beneath it occur 5 narrow, spreading bracts that are shorter than the calyx-parts, and green. The flowers, on short leafy stems, are placed in groups of two or three, forming loose terminal clusters.

The long pointed bases, by which the petals are attached, permit the calyx to be seen, from above, as a green star at the bottom of the shallow creamy cup; the calyx is noticeably flat, and sticky.

TALL CINQUEFOIL: P. arguta.

Silvery Cinquefoil. *Potentilla argentea.*

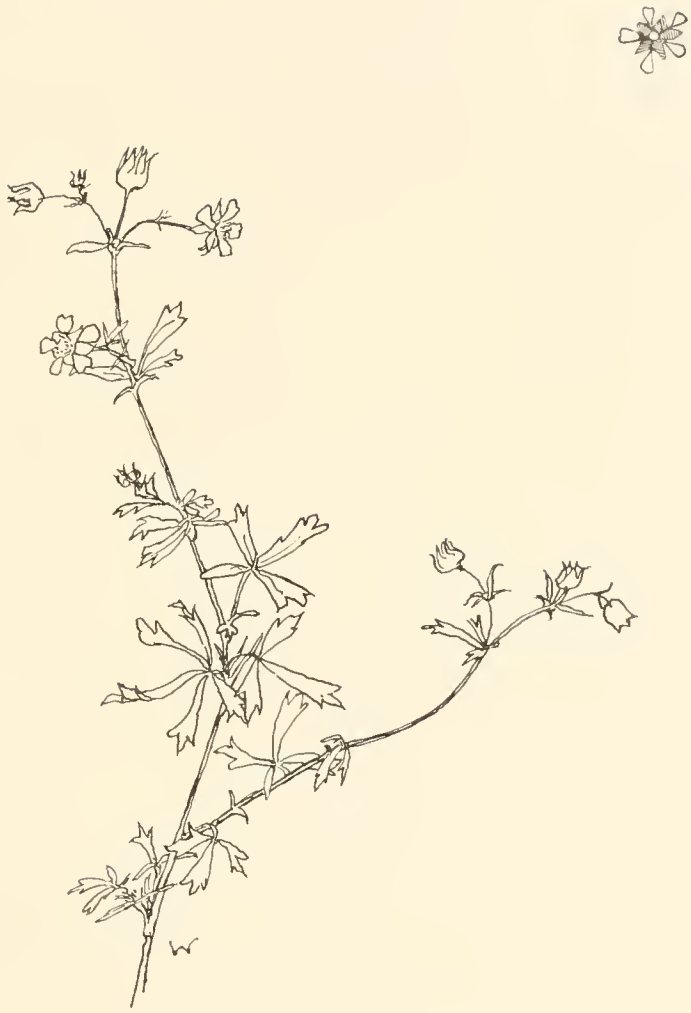
Found during June and July, in dry sandy soil, barrens and fields.

The stalk is about 6 inches high, branching somewhat, slender, stiff, tough fibred, and covered closely with silky white wool, through which the pinkish color of the bark shows.

The leaflets are 5, each being deeply cleft 5 to 9 times; the margin is entire, and the edge is slightly rolled under; the texture is very smooth and fine; the upper side of the leaf is dark green, the underside is covered with a white silky wool. The lower leaves are set on long stems, the upper leaf-stems gradually shorten till they disappear and the leaves themselves clasp the stalk with a pair of wings.

The flower is like the Five-finger blossom, but smaller, with many stamens; in color it is a light clear yellow. The calyx-parts are as long as the petals; green above, and white underneath. The flowers, on short leafy stems, form little terminal groups.

The silver lining of the pretty leaf outlined by its tiny rolling edge of bright green is a highly attractive feature, and the surface is charming to the touch.



SILVERY CINQUEFOIL : P. argentea.

Shrubby Cinquefoil. *Potentilla fruticosa.*

Prairie Weed.

Found from July to September, in pastures and springy meadows.

This bushy, branching, and very leafy plant grows from 1 to 3 or 4 feet high; it is tough, and woody-fibred, with a thin bark, roughened by hairs. Dull tawny-brown in color, dark at the foot. The new shoots are covered with white down.

The leaf is divided in 3 to 7 long, narrow, and oblong leaflets that are pointed at each end, with entire margins, the edge being rolled under; the texture is thick, and the surface hairy. In color a dull yellow-green, the under surface whitish. The leaves, on short slender stems, are placed in little groups, close together.

The flower is larger than those of the other Cinquefoils described: of 5 rounded petals, with slender bases, fine texture and smooth surface; strong yellow in color. There are many short, dark-tipped stamens. The calyx is 5-parted, with an equal number of alternating bracts beneath; it is shining smooth on the inside and downy without; yellow-green, the bracts being greener,—they are also less downy. The flowers, on short downy stems, form leafy close terminal groups.

Possessed of an almost indestructible toughness, and rapid in growth, this plant is one of the worst of pests, sometimes usurping a whole field, from which it is a formidable task to dislodge it. It has been largely introduced into western Vermont through garden cultivation. The petals fall quickly; seen in great masses the general hue is coarse and unpleasing.

SHRUBBY CINQUEFOIL: P. fruticosa.

SAXIFRAGE FAMILY.

SAXIFRAGACEÆ.

Early Saxifrage. . *Saxifraga Virginiensis.*

Rock-Breaker.

Found blossoming in April and May, in rocky grounds and hillsides.

The leaves and flowering stems, from 4 to 9 inches in height, rise from the root.

The small oval leaves have rounded tips, short broad foot-stems, and scalloped edges; their texture is thick and smooth, and their color a vigorous green. They form a close round tuffet upon the ground.

The small flowers have 5 long white petals and 10 yellow stamens apiece; their light green calices are 5-parted; and they grow in open clusters on the summit of a thick, round, and downy stem, which rises from the middle of the leafy rosette.

The buds appear already formed, early in the spring; as soon as the snow leaves the ground they appear as a small, round green ball well settled down in the middle of the leaf-tuffet; this bunch of buds pushes itself boldly up, on its thick stem, which is still quite short when the flowers begin to open. As the stem lengthens the clustered flowers become less dense until, finally, it reaches its full height, and the blossoms, fully expanded, spread loosely apart; they remain in perfection a long time—two or three weeks. The roots of this hardy plant, pushing in among the crevices of the rocks, fracture them by their vigorous growth; this gives it the name of Saxifrage or Rock-Breaker.

EARLY SAXIFRAGE : Saxifraga Virginiensis.

Mitre-Wort. *Mitella diphylla.*

Bishop's Cap.

Found on moist banks and in light woods in May.

Leaves and flowering stems, to the height of 8 to 15 inches, or more, spring from the root.

The leaf is somewhat triangular in shape, with a pointed tip and deeply heart-shaped base; 3- to 5-lobed, each lobe being slightly cut into 3 or 5 notches, the ribs and veins noticeable, the texture thin and loose, and hairy on both sides, the underside being also glossy; in color a full green. The leaf is borne singly on a long very hairy stem, which is tinged with red near the foot. Small, very short-stemmed leaves also occur in single pairs upon the flower-stems.

The flower is small, exquisitely shaped, with its 5 white petals cut into little branching threads in the semblance of a snow crystal; the 10 little yellow stamens just show within their hollow center; the yellow-white cup-shaped calyx is slightly 5-parted. The flowers are set on tiny foot-stems, and arranged in a spire upon a tall, slender, somewhat hairy stem.

Several leaves and two or three flower spires rise from the earth together, each protected by purple-red sheaths. The sole occasion for its name lies in the quaint shape of the seed.

MITRE-WORT: Mitella diphylla.

Nancy-over-the Ground. *Tiarella cordifolia.*

White Cool-wort (N. Y.)

False Mitre-Wort.

Found on wooded slopes, in moist nooks during May.

The root throws out slender runners, which bear leaves, and flowers on upright, 4- to 8-inch long, hairy stems.

The leaf is heart-shaped at the base, its lobes overlapping the stem, and the margin is cut and toothed irregularly into a faint semblance of a maple-seedling leaf; the edge is slightly curling, the noticeable ribs are hairy underneath, and the fibre is coarse; the color is green, often speckled with rusty spots.

The 5 small, pointed petals spread alternately with the 5 blunt-tipped calyx-parts; the flower is all pure white, except for the orange tips to the 10 stamens; the long, sharp-pointed pistil is conspicuous. These pretty feathery flowers, on their little foot-stems, are arranged in a loose spike, borne by the long, sometimes leafy, flower-stem.

Nancy spreads rapidly, carpeting the earth with its close-growing flat leaves above which the flower-spires rise alertly. The foliage turns brown and gray early in the summer.

NANCY-OVER-THE-GROUND: Tiarella cordifolia.

Wild Currant. *Ribes floridum.*

Found in blossom in May, on the edge of thickets.

A bush, from 4 to 5 feet high, with a branching, woody stem, covered with a gray bark.

The leaf is lobed after the manner of the currant leaf, with a heart-shaped base, and toothed margin; the veins are numerous, the surface smooth, and the color a full green. The leaves, on inch-long foot-stems, which widen at the base, and are fringed along the edges with light, weak hairs, grow in small alternate clusters on the branches.

The bell-shaped flower is 5-parted at the top, the divisions rounded and recurved; the small petals are set within the large calyx-bell, alternating with 5 tiny stamens; the color is a pale greenish-yellow. Each flower bell hangs on a short stem, with a narrow leaflet at its foot; from six to ten, or more, bells droop in a cluster, from the angles of the leaves.

The small fruit is black.

WILD CURRANT: Ribes floridum.

Grass of Parnassus. *Parnassia Caroliniana.*

Found in moist ground from July to September.

The flower-stems rise from a cluster of leaves to the height of 6 or 12 inches usually.

The leaf is rounding, often scoop-shaped or sometimes heart-shaped at the base, with an entire margin, and a thick, leathery texture; in color an opaque dull green. It is set on a long stem, and rises from the root.

The flower is like a shallow saucer, formed of 5 white petals which are much veined with hair lines of pale green; the green calyx is 5-parted; the pistil is green, and surrounded by 5 large-tipped stamens, which alternate with the petals, and a second circle of stamens without anthers,—all straw-color. It is borne singly on a long one-leafed stem.

GRASS OF PARNASSUS: Parnassia Caroliniana

ORPINE FAMILY.

CRASSULACEÆ.

Live-for-ever. *Sedum Telephium.*

Pudding-bag-plant.

Aaron's-rod (N. H.).

Stone-crop.

Witches' money-bags (Mass.).

Found in rocky soil, along roads and in door-yards, blossoming during August.

Its very leafy and branching stalk, from 1 to 2 feet high, is large and round and juicy; very smooth, and pale green, inclining to pink near the blossoms.

The broad, oval leaf, with its stout midrib, and slightly scalloped margin, is thick, tough, and juicy; the surface is very smooth, and the color a light gray-green, pale on the underside with a bloom, and moist to the touch. The leaves clasp the stalk alternately, and very close together, from foot to flower.

The small richly-hued flower has 5 sharp-pointed petals, which spread widely, and are colored a full crimson or garnet; the 5-parted green calyx being also toned with red. The flowers form a close, round, terminal cluster.

Shrugged down among the close gathered leaves the bloom has a jewel-like effect of glowing color, and the seed-cases take on a deep red hue which prolongs its season of beauty as a compensation for its infrequent flowering. The plant's endurance during droughts and tenacious hold on life are remarkable; a cut stalk has been observed full of unwithered bloom a fortnight after the farmer's scythe had swept the roadside. To children its charm lies in the power of inflation which belongs to the easily separated skin of the leaves.

LIVE-FOR-EVER : Sedum Telephium.

SUNDEW FAMILY.

DROSERACEÆ.

Sundew. *Drosera rotundifolia.*

Found on swampy ground in July and August.

A little plant growing close to the earth and sending up a flowering stem about 3 or 4 inches in height.

The small, round leaves, slightly hollowed like a shallow saucer, are tough, light green in color, and covered with short, curling, red hairs that exude a clear gummy liquid from their tips; they are set on short, flat stems, and arranged in a tuffet.

The small flower has its parts sometimes in fives and again in sixes; their white petals are rounded at the tips, and the calyx is light green; they are placed in a close, one-sided spire, that curls over at the tip, on the top of a slender, erect, red stem, rising from the middle of the leaf-cluster.

The red hairs on the leaves tipped with clear fluid sparkle as though with dew; this is the gummy substance that catches the unwary insects which alight and detains them to their everlasting doom,—it is said that this hairy little vegetable has a cannibal's appetite for flesh, and draws nourishment from these victims. The Sundew grows close among the pale green swamp-moss, and can only be detected by close observation; when in bud it can be more easily discovered through its red flower-stem. It is extremely difficult to find it in blossom or to decide as to the conditions favorable to its unfolding,—when at length surprised, it will be found with only one flower open, its face set toward the zenith.

ROUND-LEAVED SUNDEW : Drosera rotundifolia.

WITCH HAZEL FAMILY.

HAMAMELIDEÆ.

Witch Hazel. *Hamamelis Virginiana.*

Wych Hazel.

Found from late September to November, by woodland pools,—near water always.

This is a shrub, or small tree, from 6 to 12 feet in height, with wide-spreading branches, very tough fibre, and a tight, firm bark, smooth and shining at the tips, of a mottled gray-brown color.

The large oval leaf, with its broad, flat shape, has a wavy and irregularly notched margin, many strong ribs, a tough texture, and a surface which is shining above, and hairy along the underside of the ribs; of a vigorous green color,—in autumn a strong gray-yellow. The leaves, on stout little foot-stems, are alternate.

The flower has 4 slender ribbons for petals, and 8 stamens (only 4 of which bear anthers), of a delicate greenish-yellow color; the calyx is small, and parted into 4 sharp divisions which show in the form of a square between the petals; it is downy, thin, and pale tawny in color. Beneath the calyx are 2 or 3 little bracts; and tough, bark-like, brown outer bracts hold 2 or 3 flowers in a close group upon a short stem; these groups are scattered all along the branches in the angles of the leaves.

Nothing of the spring approaches the mystery of this flower. Late in autumn the straggling Witch Hazel bushes, standing about a pool of dark water in front of bare woods, lift their full tawny leafage and evasive pale golden bloom against the lavender twiggery, and purple-gray sky, filling the air with their strange fragrance. Their seeds ripen during the following summer; they are brown, and nut-like, and the pods will burst with a subdued "pop-pop" if taken into a warm room.

WITCH HAZEL: Hamamelis Virginiana.

EVENING PRIMROSE FAMILY.

ONAGRACEÆ.

Day and Night Primrose. *Œnothera pumila.*

Found in June on sandy banks and dry pastures.

Its single leafy stalk, from 12 to 15 inches in height, is very slightly hairy, and somewhat shining. It is pale in color, inclining to dull pinkish.

The root-leaves are round at the tip, tapering to the base, and set on long stems; the upper leaves are long, and narrow, with stem-like bases; the margins are entire, the texture close and velvety to the touch; in color dull green, the foot-leaves pinkish slightly. Set near together, and alternately.

The 4 petals of the flower are heart-shaped, and spreading with a shallow curve, of a thin texture, which shows the veins, and in color a beautiful clear yellow; the calyx-tube is about a half-inch long, the part which contains the seed-box is thick, grooved, and green, the upper part is slender, and tinged with red: the 4 calyx-divisions are dry and pale. The flowers are set in the angles of the upper leaves.

According to Dr. Gray the blossoms of this plant which open in early sunlight do not go to sleep until eleven o'clock at night. For a space beneath the flowers the close-set leaves cease and the somewhat curving stalk is bare.

DAY AND NIGHT PRIMROSE : Œnothera pumila.

Evening Primrose Family.

Common Evening Primrose. *Œnothera biennis.*

Found in pastures and roadsides, beginning to bloom in July and continuing until frost-time.

The stout and leafy stalk grows from 1 to 4 feet high; it is woody-fibred, hairy, and light green in color.

The narrow, lance-shaped leaf tapers at each end, and has a strong midrib, an irregular margin, and a very downy surface; in color green. The upper leaves clasp the stalk by a stem-like base, the lower ones with a strong, little foot-stem; they are alternately placed.

The 4 large heart-shaped petals, of a fine, thin texture, are a pure light yellow color; the 8 stamens are orange-tipped, and the 4 divisions of the calyx are pale yellow; they turn back upon its tube with a twisting gesture. This calyx-tube is over an inch in length, the lower half, which contains the seed-box, is enlarged, grooved, sticky to the touch, and shining green; the upper part is slender, smooth, and not sticky, and pale yellow in color. The flowers are set close on the stalk in the hold of the leaves.

After its one night's fragrant perfection, the withered blossom hangs for a day or two, before its calyx-tube severs itself from the seed-box as neatly as though cut by a knife. It is only by chance that the clarity of the flower's yellow hue is seen, when, in some gray morning fog, a belated flower is caught full-blown. Sometimes the plant grows to the size of a bush; its fall seedling shows a flat tuffet of curious, white-marked lily-like leaves that hug the ground.

COMMON EVENING PRIMROSE : Œ. biennis.

Evening Primrose Family.

Great Willow Herb. *Epilobium angustifolium.*

Fire-weed.

Found by the wayside, and on newly cleared or burned lands, blossoming from June through August.

It has a simple, tall, and swaying stalk, from 3 to 6 feet high; it is round, and smooth, of a fine fibre, and inclined to red in color.

The long, narrow leaf has a general resemblance to that of the willow; it is smooth, firm, and fine in texture, and of a cool dark grayish-green color, and silvery beneath, with a light midrib. The leaves are alternate on the stalk, without foot-stems.

The 4 rounded petals of the flower curve into a short foot, or claw, at the base; they are of a fine and delicate texture, and a bright, clear crimson-pink color; the 4 long, pointed divisions of the red-brown calyx alternate with the pink petals; the pistil is 4-parted and curled spirally at the tip; the stamens 8. The flowers are poised on the top of the slender, silky, violet-tinged pods, and arranged in a loose, long, and curving spike, on the top of the stalk.

The plant gains its name of "Fire-weed" from its habit of springing up on newly burned woodlands. Seen in the sunshine its coloring is brilliant. Its long curving slender pods, bursting open lengthwise, set free a mass of fine silky down, the wings of the tiny seeds.

GREAT WILLOW HERB : Epilobium angustifolium.

Small Willow Herb. *Epilobium coloratum.*

Found in damp ground, in meadows and ditches, in blossom in August and September.

Its erect branching stalk grows from 1 to 2 feet high, and is strong-fibred, round, and smooth; color green, often a fine crimson.

The long, narrow leaf has a finely notched margin, a smooth surface, and a fine texture; dark gray-green in color. The arrangment is usually opposite, on very short foot-stems.

The small flower has 4 rounded petals, notched at the tip: they are a pale violet-tinted white; there are 8 small stamens, and a club-shaped pistil,—all pale yellow; the 4-parted calyx is green. The flower is set on the top of the slender pod.

In the autumn the mass of downy pods and crimson-red stems make of this unpretentious plant a pleasing bit of color; its fine qualities of texture contribute to its attractiveness.

SMALL WILLOW HERB : E. coloratum.

Enchanter's Nightshade. *Circæa alpina.*

Found in cool damp shade during July and August.

The thick and juicy stalk, which grows from 4 to 8, or even 10, inches in height, is round, and smooth, and branching. It is light green, red at the joints.

The heart-shaped leaf is rather large near the foot, with a coarsely notched margin, a thin texture, and smooth surface; light green in color. The leaves, on slender, short stems, are set in pairs, which occur at right angles to each other.

Its very tiny flower with the 2 round-tipped petals, 2 alternating thread stamens, and 2-parted calyx is all pure white, though the calyx-divisions, which turn downward, are slightly tinged with green. The flowers, on very tiny foot-stems, are scattered along very curving stems, which spring terminally, and from the angles of the upper leaves.

Found only in shady woods, this plant courts no notice, but gratifies its lovers with an indefinable charm of growth and color, as shy and evasive as the dim light of the silent woodland spaces it inhabits.

ENCHANTER'S NIGHTSHADE : Circæa alpina.

GOURD FAMILY.

CUCURBITACEÆ.

One-seeded Bur-cucumber. *Sicyos angulatus.*

One-seeded Star-cucumber.

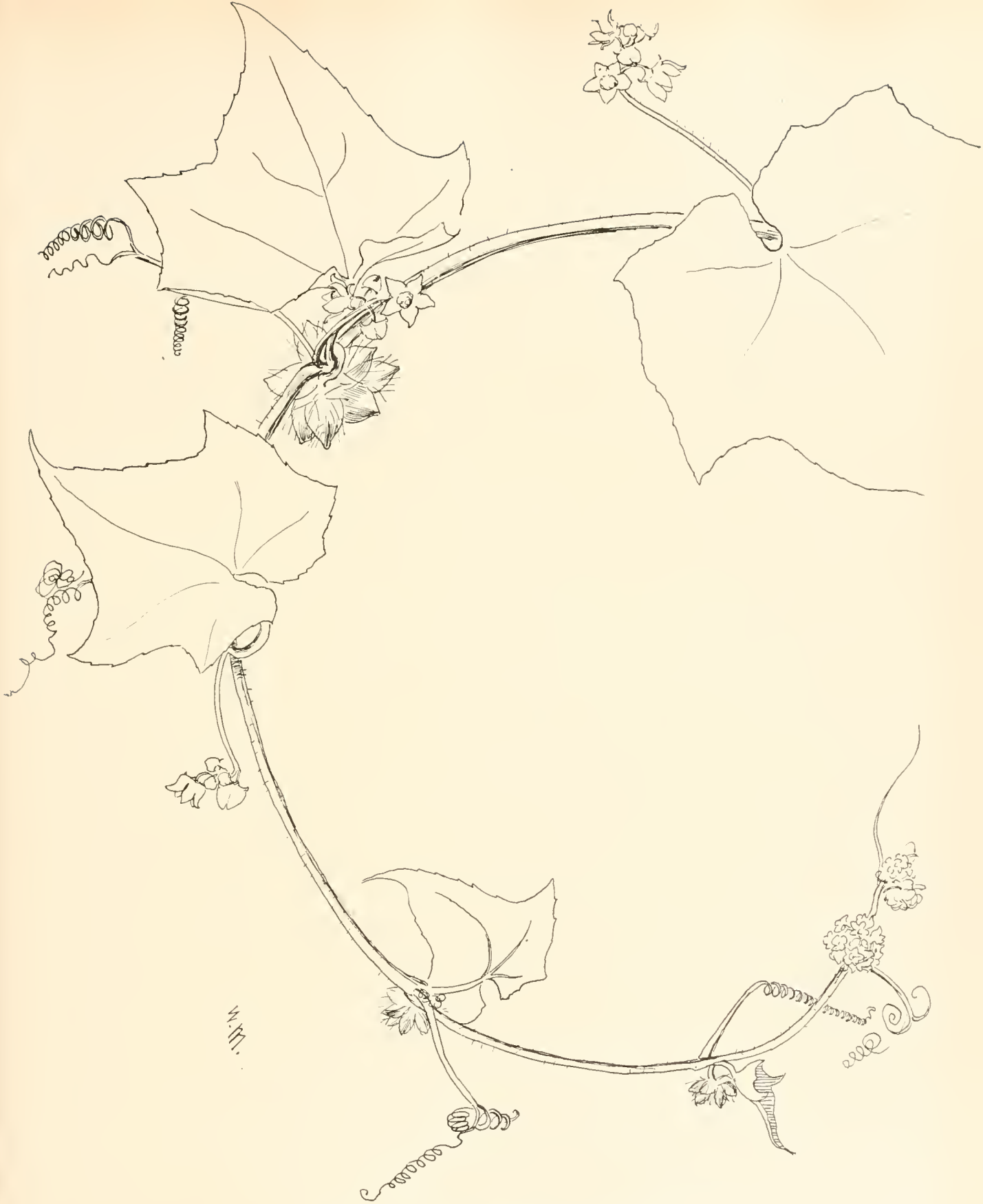
Found in blossom from July to September, on moist ground, and along river banks.

A vine, with a coarse, rough stem, climbing by aid of little spirally twisted tendrils.

The broad leaf is more or less 5-pointed, or lobed, with a heart-shaped base, and a long tapering tip; the surface is roughened by small hairs, and the texture is loose and coarse; it has a short foot-stem, and is bright green.

The small 5-pointed flowers are of two kinds; the stamen-bearing ones, in clusters of 4 or 5 on a long foot-stem, spring from the angles of the leaves, while the seed-bearing blossoms are in almost stemless clusters close in the angles: they are greenish white, with yellow stamens.

A single large seed is enclosed in a flattened, pointed pod, which is armed with many fine, tough, bristles, that are easily detached in plucking and are irritating to the skin. The vine has a great number of tendrils.



BUR-CUCUMBER : Sicyos angulatus.

PARSLEY FAMILY.

UMBELLIFERÆ.

Sweet Cicely. *Osmorrhiza longistylis.*

Found northward, in rich, moist woods, blossoming in May and June.

The round, smooth stalk bears leaves at long intervals, and is in color green, running into dull purple. It is 1 to 3 feet in height.

The large compound leaf is 3 times divided, and has the general aspect of a fern leaf; the taper-pointed leaflets have strongly notched margins, and noticeable ribs; the texture is thin, and the color green.

The small flower has 5 somewhat unequal, heart-shaped, white petals, 5 stamens, and a long calyx.

The anise-like flavor of the large root renders it attractive to the palate of the herb-browser. The long seeds are armed with backward pointing prickles, and snatch rides on the wayfarer's garments after the manner of the plebeian Beggar-ticks. Cicely is sweet, tall, and graceful in gesture, fine in the finish of its leaf joints, and distinguished by a few fern-like leaves; apparently a plant of good breeding. Where could its seeds have learned such a beggarly trick!

SWEET CICELY : Osmorrhiza longistylis.

Meadow Parsnip. *Zizia aurea.*

Found in meadow grass lands, in May and June.

The sparingly branched stalk, from 2 to 3 feet high, is tough-fibred, and smooth, though channeled with many fine grooves; it is hollow, with an aromatic smell, and usually tends to a dull red color.

The 2- or 3-times divided leaf has narrow leaflets, tapering to the tip, and sharply toothed on the edge; the surface is smooth, and the texture firm; the color a strong, full-toned green. The leaves are few, at long intervals, on short foot-stems that widen into a leafly membrane, partly clasping the main stalk.

The minute yellow flower has 5 petals, turned in toward the center; the stamens and pistil are small, and the calyx is of a pale yellow-green color; the flowers grow in flat-topped clusters, from 2 to 3 inches broad, or larger.

In the hand, the Meadow Parsnip seems a little coarse in color and texture, but its aspect is pleasing when seen lifting its bright yellow green-ribbed parasols above the meadow grass.

MEADOW PARSNIP : Zizia aurea.

Sanicle. *Sanicula Marylandica.*

Black Snake-root.

Found in woods, and light shrubbery, in June.

The simple, sparingly branched stalk grows from 2 to 3 feet high, and is round, smooth, slightly grooved, and hollow; it is green in color.

The leaf is deeply cut, or divided, from the base, ("palmate") into from 3 to 6 long-pointed divisions, sharply notched on the edge; in color rather dark green. The leaves clasp the stalk by a very short, leafy sheath, and appear clustered at the top, and alternate below, while the root-leaves are on long stems.

The small, greenish-yellow flower has 5 petals with the tips turned inward and tucked down into the center of the flower; under the petals are concealed the stamens (which emerge at length, however). The flowers are on very short foot-stems arranged in hemispherical heads, three or four heads usually in a cluster, on the end of the stem. Two kinds, stamen-bearing and pistil-bearing, are found in the same head; the former dry up brown, while the latter develop burs armed with little hooked spines.

Though the flower is not conspicuous in color, the plant claims notice for its rather graceful, swaying gesture.

SANICLE : Sanicula Marylandica.

Cow Parsnip. *Heracleum lanatum.*

Found in moist rich grounds, often on the edge of shade, in blossom in June.

The stalk grows very tall, sometimes 7 or 8 feet high; it is large, round, and grooved—though not deeply so; it is hollow, with a strong parsnip smell; and grass-green in color.

The leaf is compound, in three divisions, and large, the lower leaves being sometimes a foot or more in length; each leaflet is more or less deeply lobed, and sharply notched on the edge, and set on a short foot-stem; the ribs are large, the upper surface almost smooth, while the lower surface is soft and woolly; coarse in texture, and of a strong dark green color. The main foot-stem of the leaf, widens into a leafy membrane that partly clasps the stalk. The few large leaves are alternate.

The flower is small, and 5-petalled, the petals heart-shaped, or deeply notched; the outer flowers are larger than the inner ones, and their petals are quite unequal in size. In color white. They grow in wide spreading, flat-topped clusters, sometimes 10 or 12 inches across.

On close approach the Cow Parsnip appears coarse in general make-up; seen from a distance however it looks a plant of splendid swing and unbounded vigor, a veritable Hercules of the fields!

COW PARSNIP : Heracleum lanatum—$\frac{1}{3}$ life size.

Water Pennywort. *Hydrocotyle Americana.*

A close observation will show that this may be found in blossom in July, on moist, shady ground.

The weak-fibred, smooth, pale green stalk creeps over the ground, and takes root, occasionally, at the joints.

It has a pretty, round, heart-shaped leaf, doubly scalloped on the edge, and of a thin texture, with a smooth, shining surface; of a pale green color. The leaves are alternate, on foot-stems about an inch long.

The minute white flowers are set close in the angles of the leaves and are hardly noticeable.

The Pennywort grows gracefully amongst the grass in moist places. One would hardly suspect, at a casual glance, that this weak-fibred vine could belong to the same family with the mighty Cow Parsnip.

WATER PENNYWORT; Hydrocotyle Americana.

Field Parsnip. *Pastinaca sativa.*

Found in roadside thickets, along meadow walls and fences, during July and August.

The large, widely branching stalk reaches the height of 4 or 5 feet; it is 4-, or occasionally 5-angled, very tough and woody-fibred, noticeably grooved, and its surface is coarse; dull green.

The compound irregular leaf is large: the root-leaves are cut into 7 to 11 divisions, each part again cleft into 3 or 5 parts,—the upper leaves are less compound; the leaflets are long oval, broadest at the base, the margins closely notched, the texture thin, but coarse, the surface smooth, the underside of the upper leaves shining. The color is a dull dark green. The root-leaves are on long stems, while the upper leaves are on shorter stems which clasp the stalk with wing-like membranes; these are grooved, and large, their edges roll together, and meet and lap about the stalk. The leaves are placed alternately, at considerable intervals apart.

The tiny flowers are yellow, they spread flat, to show the undeveloped seed-boxes, and are set on thread foot-stems in small, flat-topped, round clusters; these, on long, up-curving stems, form a large spreading cluster, upon a stout stem; they are terminal and from the angles of the leaves; several of these large clusters occur on a plant.

"'T will raise a blister, if you touch it when the dew 's on 't!" says the farmer's son. It has a strongly acrid odor when broken, a thing which is well-nigh impossible to accomplish. The seeds, shining and very flat discs, add to the decorative qualities of this conspicuous plant.

FIELD PARSNIP : Pastinaca sativa.

Wild Carrot. *Daucus Carota.*

Queen Ann's Lace.

Very common by the wayside and in dry fields, blossoming from July through September.

The round stalk, from 2 to 3 feet high, coarse in fibre, and roughened by short hairs, is light yellow-green in color.

The leaf has a very fringy effect, being much cut up into long narrow lobes; the surface is roughened; and the short foot-stem widens into a leafy, clasping sheath. The yellowish-green, alternate leaves are few, and far between.

The petal-like parts of the small clustered flowers are unequal in size and number,—three or four of the outer flowers in each cluster are larger than the rest; the color is white, with tiny yellow-tipped stamens. The flowers have pale green foot-stems, and grow in flat-topped clusters, each cluster being set around at the foot with a green leafy fringe. In the center of the cluster is often found a single dark purple flower.

Though the growth is sprangly, and the stem coarse, yet the flower is delicate with a lace-like quality. The seed-stems, curling inward, form a hollow, nest-like cup, from which characteristic it is often called the "Bird's-nest plant." It is deemed a great pest by farmers.

WILD CARROT : Daucus Carota.

GINSENG FAMILY.

ARALIACEÆ.

Wild Sarsaparilla. *Aralia nudicaulis.*

Found on moist hillsides, and along thickets, in May.

The root sends up one tall leaf-bearing stem, from 12 to 15 inches in height, and beside it a short flower-stem.

The leaf is compound, sometimes doubly so, its leaflets long, oval, and sharp-pointed at the tip, with noticeable ribs, finely notched margins, and, when young, a very glossy surface; the foot-stems are 3, and of equal length, forking from the summit of the round, hard-fibred, shining stem. The leaf, when young, is strongly bronze-tinted; as it matures this fades, and leaves it a pleasing light green color; the stem is reddish at the joints, and near the foot.

The greenish-white flower is very small, its 5 petals are turned down on the little calyx, and the 5 long stamens are erect and alternate with them. The flowers are set on foot-stems in 3 flat-topped clusters, that are borne on round stems forking from the top of the main flower-stem.

The bronzy hue of the leaves companions the unopened buds,—by the time the flower-clusters are fully abloom the dark shining color has changed to green, the leaflets have grown much larger, and spread like a canopy over the blossoms.

WILD SARSAPARILLA : Aralia nudicaulis.

Spikenard. *Aralia racemosa.*

Spignet (Vt.).

Found along rich woods and wayside thickets, in blossom in August.

A widely branching plant, from 3 to 6 feet high, with a large, strong, round stem; dull gray-black, not unlike willow charcoal in appearance.

The very large compound leaf is divided into 3 clusters, each one of which has from 5 to 7 leaflets, on short, curved foot stems; the leaflets are broad, of an irregular oblong shape, with a finely notched margin, and a slightly downy surface. In color a strong full green; with dark stems.

The very small flower has its parts in fives, and is greenish white; the flowers are on pale foot-stems and arranged in little round clusters; many small clusters together form the large compound group on the ends of the branches, and from the angles of the upper leaves.

In September the plant ripens a small red berry, of a spicy, resinous taste, agreeable to a confirmed wayfarer. The large joints are fitted together with excellent workmanship. This striking plant, with its wide-spreading, vigorous leafage, and dark stems, possesses highly decorative qualities; it is cherished by country folk, however, for the medicinal use they find for the root which is "good for a cough."

SPIKENARD : A. racemosa—½ life size.

DOGWOOD FAMILY.

CORNACEÆ.

Bunch-berry. *Cornus Canadensis.*

Dwarf Cornel.

Found in moist woods in May and June.

A small plant from 5 to 7 inches high, with a strong fibred, 4-angled, and deeply grooved, pale green stalk.

The broad oval leaf, tapering at both ends, has many deeply-marked ribs; it has a smooth surface, and is of a yellowish-green color. The leaves are set close on the stalk, in a whorl-like cluster of 4 or 6; occasionally a second group occurs below this.

The real flowers are small, and many; bunched together in a close, flat cluster, which is surrounded by 4 large, greenish-white, petal-like leaves, giving the semblance of a single large flower, rising, on a small foot-stem, above the leaves.

The seeds of this little plant take the form of a bunch of brilliant sealing-wax-red berries, set in the center of the greenery, and nodding on the stem with their own weight.

BUNCHBERRY : Cornus Canadensis.

HONEYSUCKLE FAMILY.

CAPRIFOLIACEÆ.

Smooth-leaved Honeysuckle. *Lonicera glauca.*

Found in rocky grounds and uplands during May.

A bushy, and somewhat twining shrub, leafy and tough, which grows from 3 to 5 feet high, with a gray bark, that is green when young.

The rather large leaf is oval, and broadest at the base, with a rounded tip, and an entire margin; the fibre is firm and the surface is smooth; in color it is green, silvery underneath. The leaves occur opposite each other, the upper ones growing completely together around the stalk, the lower being only partly united.

The small flower has a slender tubular corolla spreading into 2 unequal divisions, the upper broad, and 4-cleft, the lower entire, long, and narrow; in color a pale, dull tawny or red; the 5 long stamens, with their very distinct tips, are pale greenish-yellow; the long pistil is tipped with a green disc; the round calyx is minutely 5-parted, and green. The flowers, on the ends of the branches, are set close around the stalk in whorls, usually of 6, after the Honeysuckle habit.

What charm the flowers lack in fragrance, the plant makes up in the graceful curves of its partly twining stems, and in its attractive leafage.

SMOOTH-LEAVED HONEYSUCKLE : Lonicera glauca.

Maple-leaved Arrow-wood. *Viburnum acerifolium.*

Dockmackie.

Found in light, rocky woods, in May and June.

The tough, woody stalk, growing from 2 to 3 feet high, is branching, and covered with a smooth brown bark.

The broad, 3-lobed leaf much resembles a maple leaf in outline; it has, however, a soft downy surface, especially beneath,—the upper side is sometimes smooth. The leaves are set in pairs, on short foot-stems. Color green.

The small, 5-parted flower has 5 stamens, alternating with its rounded divisions. The flowers are white, and the buds pink-tinted; they grow in a flat-topped cluster, on a foot-stem springing from between the terminal pair of leaves.

In the softly diffused light of the autumn woods, its clusters of black berries, and mulberry colored leafage prove attractive to the æsthetic eye. Its habit of growth also is pleasing.

MAPLE-LEAVED ARROW-WOOD : Viburnum acerifolium.

Linnæa. *Linnæa borealis.*

Twin-flower.

Found in cool, mossy woods, and cold damp bogs ; blossoming in early June.

A trailing vine with a round, rough, and woody-fibred, reddish stem, running over the ground.

The pretty, rounding leaf has a few scallops on its edge, a slightly rough surface, and a dry texture ; it is evergreen, of a rich, dark green color. The leaves are in pairs, on short foot-stems.

The little bell-shaped corolla is about ½ an inch long, narrowing into a small tube at the bottom, and widening at the top where it is 5-parted ; it is fine in texture, fragrant, and in color white, tinged with pink. The tiny green calyx has 5 thread-like divisions. The slender flower-stems, rising erect from the creeping stalk to a height of 3 or 4 inches, fork near the top to bear the nodding twin flowers.

LINNÆA : Linnæa borealis.

Bush Honeysuckle. *Diervilla trifida.*

Found in light woods, and rocky uplands, in blossom during June and July.

A shrub, with round, woody-fibred, smooth stems; the old growth is of a light gray color, while the new shoots are green, and dull red.

The oval leaf, wide at the bottom, is very tapering at the tip: the closely and finely toothed edges are more or less ruffled: the surface is smooth, and the texture like silk; the color is a strong, warm green, often showing traces of red on the margin, and in the midrib. The leaves are in pairs, on short, stout, and partly clasping foot-stems.

The corolla of the small flower has a tube about ½ of an inch long, spreading at the top, and parted into 5 irregular recurving divisions, of a pale yellow color, marked with dull tawny-orange: the five long stamens are yellow, and the flat, disc-like tip of the pistil is green: the slender, pale green calyx is vase-shape, with 5 thread-like divisions. A few flowers grow from the end of the branches, and from the angles of the upper leaves.

This Honeysuckle has a vigorous leafage, and is full of strong curves, but it lacks the spicy fragrance associated with its name. On some plants the leaves are all opposite at the same angle, while on others the alternate pairs are set on at right angles to each other.

BUSH HONEYSUCKLE : Diervilla trifida.

Elder-flower. *Sambucus Canadensis.*

Found along meadow hedgerows, blossoming in June and July.

A bush, from 5 to 10 feet high; it is woody, and branching, with a white pith, and gray bark.

The large compound leaf has from 8 to 10 pairs of leaflets, with an odd one at the end; the taper-pointed leaflet has a notched margin, a smooth surface, and a rather thin texture; the color is a full green, lighter beneath.

The small 5-parted flower has 5 stamens and 1 pistil, and a minute calyx; it is cream-white, and grows in wide, spreading, flat-topped clusters, on the ends of the branches.

The round, reddish-black berries ripen in August and September; they were used by our foremothers to make a spicy wine. In the wild hedgerow the big creamy clusters are most effective, but when picked the little flower-wheels soon scatter.

ELDER-FLOWER : Sambucus Canadensis.

Snowberry. *Symphoricarpos racemosus.*

Found in blossom from June to September.

A shrub about 3 or 4 feet high, with a woody, branching stem, covered with a smooth bark; that of the old growth gray-brown in color, of the new growth, golden-brown.

The broadly oval leaf has an entire, somewhat wavy, margin, a smooth surface, and dry texture. It is in color a dark grayish-green, lighter beneath. The leaves grow in pairs, on short stems.

The small bell-shaped flower is 5-tipped, and filled within with white woolly hairs; it is rose-colored, running into white. The corolla sits on top of the little, round, green calyx, which develops into a large, juicy, waxen white berry. The flowers and berries grow in a close terminal spike, gradually weighed down by the enlarging berries.

Both berries and blossoms occur on the same spike. The Snowberry was largely cultivated by our foremothers in their house yards, and is still common about old houses.

SNOWBERRY : Symphoricarpos racemosus.

MADDER FAMILY.

RUBIACEÆ.

Innocence. *Houstonia cærulea.*

Quaker Ladies.

Bluets.

Found in grassy meadows, pastures, and waysides during May; generally in poor soil.

The slender, little, pale green flower-stems, from 2 to 6 inches in height, sometimes branch, bear but few leaves, and rise from a foot-tuffet of leaves.

These foot-leaves are very small, with little rounded tips, while the stem-leaves are still smaller, long, narrow, and clasping in pairs. They are entire, thin, and light green.

The flower has a tiny 4-parted, green calyx, and a tubular corolla which spreads at the top into a 4-pointed star; very delicate in texture, and varying from pure white to a deep china blue, with a dainty ring of yellow in the center.

A very communistic plant is the Innocence, growing in great patches along pasture fences and in meadow rifts and hollows, powdering the greening slopes of early May with its many blossoms like a belated spring snow-fall. Its buds droop, but the opened flowers lift up their faces to reflect the sky; its calices hug the corollas, and after they have fallen still guard the enlarged oval seed-boxes. It is not unusual to find 3- or 5-pointed stars, and even 6- or 7-pointed variations are occasionally discoverable. Tufts of seedlings found in the late autumn will flower all winter, if well-potted and watered and given plenty of fresh air.

INNOCENCE : Houstonia cærulea.

Partridge-berry. *Mitchella repens.*
Twin-berry.
Fox-berry.
Box-berry.
Two-eye-berry.

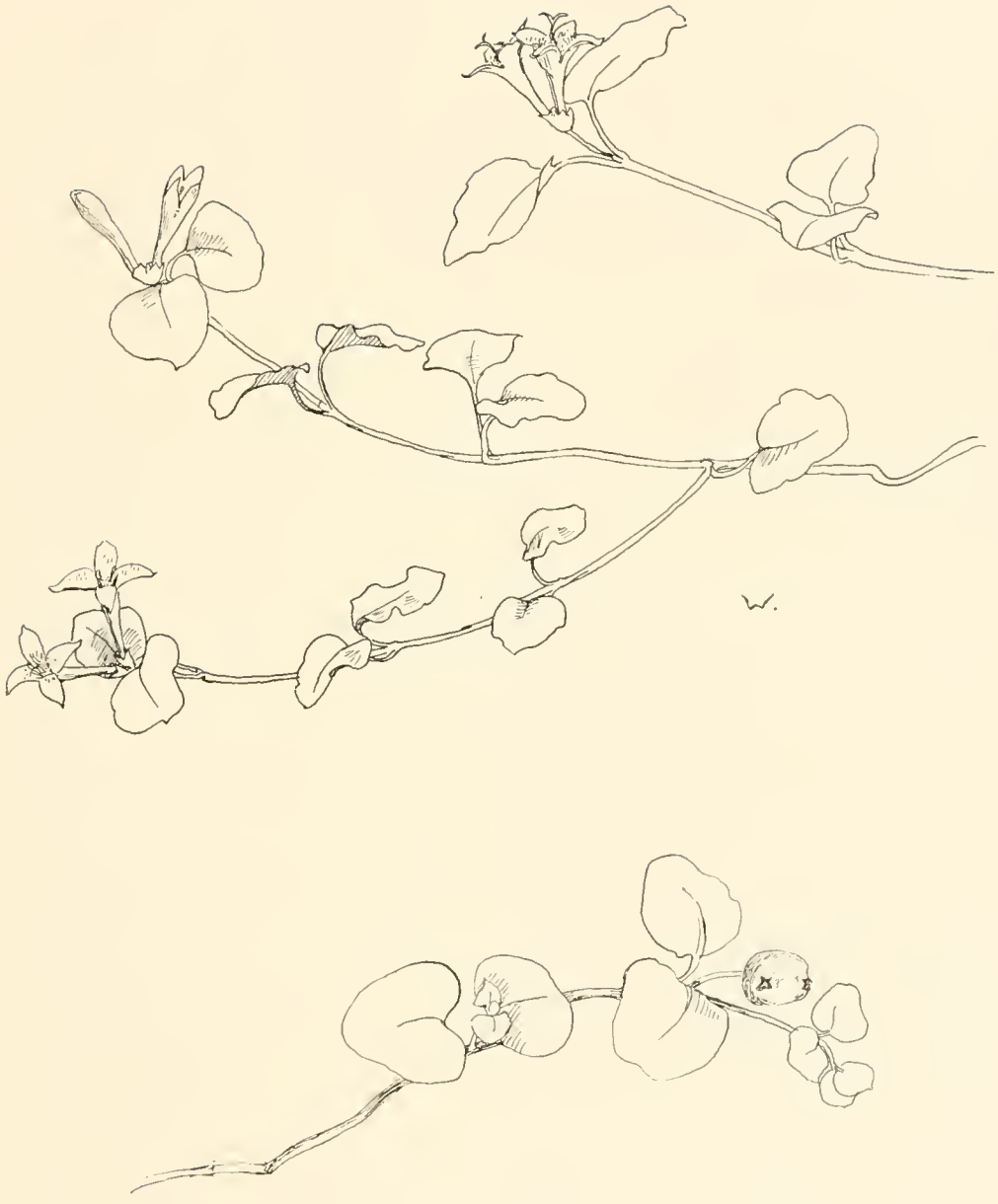
Found in June, in dry woods, about the roots of pine trees.

This little running vine, 4 to 10 inches in length, is smooth and slender, leafy and occasionally branching. In color, a pale green or dark bronze-green.

The leaf is small, round-oval, widest at the base, thin but tough of texture, with a smooth surface that shines when new-grown ; the margin is entire, and the midrib important. The young leaves are a bright cool green, lighter underneath ; the older growths become dark and bluish green, the ribs and veins marking them with a light tracery. The leaves, on short stems, are arranged in pairs.

The corolla, in the shape of a slender tube spreading into 4 points, is covered thickly in the inside with cottony down, while the outside is smooth ; the color is creamy-white, the outside delicately tinted creamy-pink. The little green calyx is 4-parted. The flowers bloom in pairs, their seed-boxes united and set on a single stem, placed terminally. The buds are pink.

Two kinds of flowers are borne on this plant, in one the 4 stamens protrude from the tube and the pistil does not show, in the other the 2-parted pistil is very noticeable and the stamens are retired. The delicious fragrance of the blossoms perfumes the whole woods where it grows. The small oval berry with its two openings is loved by children, because it is of a light coral-red color, and edible, though rather tasteless.



PARTRIDGE-BERRY : Mitchella repens.

Button-bush. *Cephalanthus occidentalis.*

Found on low, moist ground, and along borders of ponds, in June and July.

A shrub from 3 to 5 feet high, with a stout, woody stem, covered with a smooth reddish-brown bark.

The leaf, tapering at both ends, is 3 or 4 inches long, on a short foot-stem; the surface is usually smooth, and the texture tough; of a strong green color.

The small, tubular flower is 4-parted at the top, and of a dull, white color. Many flowers are set together in a dense, round head, with the pistils radiating in all directions. These sweet-scented flower-balls grow on foot-stems, 2 or 3 inches long, in clusters of 3 to 5 or 7, from the ends of the branches.

The Button-balls ripen in October, and are then noticeable among the plentiful pods and berries of the season. They are dull red and green in color, turning to a fine brown with the touch of frost. Picked early in the season they make a pleasing addition to the pod-gatherer's winter collection.

BUTTON-BUSH : Cephalanthus occidentalis.

Small Bedstraw. *Galium asprellum.*

Cleavers.

Found in blossom through August and September, in moist or swampy tangles and thickets.

The stalk is branching, but very weak-fibred, leaning on sturdier plants for support, or lopping over; it is square, and closely set along the angles with many minute downward-pointing prickles, by means of which it clings or "cleaves" to its neighbors; color, a light green.

The small leaf is rounded at the tip, has an entire margin, and a smooth upper surface; beneath, the edges and midrib are set with prickles. The leaves grow in whorls of 4 or 6, close upon the stalk, at regular intervals. The color is a pretty yellow-green.

The minute white corolla is 4-pointed, or occasionally 3-pointed, with the same number of stamens; the calyx is green, and the foot-stems are very small. The flowers grow in branching clusters from the whorls of leaves.

Though a pretty plant growing, it is not a pickable one, as its weak stems get themselves inextricably entangled and caught on their own armor.

SMALL BEDSTRAW : Galium asprellum.

COMPOSITE FAMILY.

COMPOSITÆ.

Plantain-leaved Everlasting. *Antennaria plantaginifolia.*

Spring Everlasting.

Pussy-toes.

Found in light soil, meadows, and uplands, in April and May.

The short, leafy stalk, covered with a silvery wool, runs on the ground, and is from 3 to 10 inches in height. Pale green in color.

The small, broad-oval leaf is rounded at the tip, 3-ribbed, of a tough fibre, and, when young, covered with a silky white wool. It is set on a short, margined stem. In color, light grayish-green.

The flowers are gathered in small heads,—the stamen-bearing and pistil-bearing flowers growing on different plants. The pistil-bearing heads are like little bundles of silky threads, silvery white; the stamen-bearing heads are more rounded in shape, and of a creamy-white color, the tawny stamens being tipped with orange. The heads are set in pale green, urn-shaped, small cups, on short foot-stems, forming a little group on the top of the flower-stem.

Spring Everlasting spreads rapidly by runners sent out from the main plant, and its grave prettiness does not save it from being considered a troublesome pest by the farmer looking for good grass pasturage for his herd.

PLANTAIN-LEAVED EVERLASTING : Antennaria plantaginifolia.

Dandelion. *Taraxacum officinale.*

Found, during April and May, in every sunny meadow, lawn, and grassy road.

The leaves, and the flowers on stems which vary from 3 or 4 to 12 inches in height, rise from the root.

The long and narrow leaf is often and irregularly cut, the notches generally pointing backwards, and the margin is also sharply toothed; the texture is close, the surface is smooth, and the midrib is wide; the edge is wavy. In color, grass green, the midrib pale. Many leaves grow in a rosette-like cluster from the root,—the flower buds held in the center.

The small "strap-shaped" flowers, with their notched ends, are gathered in overlapping rows, to form a large circular head; in color they are a brilliant orange-yellow, the central flowers deeper in tint. The head is confined in a cup of many narrow, dark green, leafy bracts, and set on long, smooth, elastic stems, which are hollow, and juicy with a bitter-flavored milk.

The seed-globe of the Dandelion is a favorite with children, by whom it is named a "clock"; its seeds are furnished with feathery plumes, which serve as wings to waft them abroad. The flower-stem too is easily split when plucked, and curls into enchanting spirals that no youthful taste may resist. When cut off short by the cruel lawn-mower, these generous plants put forth fresh golden discs close to the ground within the leaves.

DANDELION : Taraxacum officinale.

Coltsfoot. *Tussilago Farfara.*

Found in moist meadows, on banks, and brooksides in May.

The flowers and leaves grow from the root, about 4 or 6 inches high.

The leaf appears some time after the flowers; it is large, rounding, with a heart-shaped base, the margin slightly broken by small rounded points, and with strong ribs radiating from the base; it is exceptionally fine in texture, and the upper side is possessed of a silky smoothness, the lower side being soft woolly (the new leaves are very woolly). They grow from the root on stout, half-round stems, that are dull purplish-red in color, and often covered with a loose white wool: the leaves are a fine cool green, silvery beneath.

The small flowers are grouped in dandelion-like heads, with many fine fringy rays; all colored alike a bright yellow. The head is held in a deep, leafy cup that is green strongly tinged with reddish-brown; it grows on a stout, grooved, roughish stem, which bears several, small, brownish scales; it rises from the ground before the leaves.

The Coltsfoot, introduced from England, has become thoroughly naturalized here. Its blossoms bear a certain superficial resemblance to the Dandelion, though really different in habits of growth. The leaves are truly decorative, growing thickly in large spaces, and forming a mosaic of green tiles close down to the brook's edge.

COLTSFOOT : Tussilago Farfara.

Robin's Plantain. *Erigeron bellidifolius.*

Found in meadows and fields, during May and June.

The stalk (from 8 to 18 inches high) is single, and sparingly leafy; grooved, and slightly hairy. Color, light green.

The long, narrow leaf, with a tapering tip, and a partly-clasping base, has a taut midrib which fulls the blade; its margin is sparsely notched (except that of the upper leaves), and the surface is slightly hairy. The color is green, with a paler midrib. The arrangement is alternate, and at long intervals.

The disc flowers are very small, and in color greenish-yellow; set in a flat-topped head, surrounded by many long rays, like a finely cut fringe, which are blue or pinkish-lavender. The cup is hemispherical, and green. The heads form a flat-topped terminal cluster.

Robin's Plantain grows in communities among tall grasses, swaying gracefully on its long stalks as the breeze sweeps over the field. This is apparently the only one of its class that is distinguished by an attractive folk-name of its own,—all the rest are Daisy Fleabanes.

ROBIN'S PLANTAIN : Erigeron bellidifolius.

Daisy Fleabane. *Erigeron Philadelphicus.*

Found in meadows and roadsides during June.

The simple, and leafy, stalk grows from 2 to 3 feet high; it is rather slender, finely grooved or lined, and a little hairy. In color a light green.

The root-leaves are very long, the others decrease in size as they mount the stalk; they are long and narrow, with sparsely and irregularly notched margins (sometimes only one to a leaf), and a firm texture, —smooth to the touch. The color is green. They clasp the stalk partly, and occur alternately.

The disc flowers form a small flat button, which is at first greenish, and later changes to yellowish-orange; the rays are many, fine and fringy in appearance, and varying in color from white to pink. The cup is light green. The flower heads grow in somewhat flat-topped clusters on the top of the stalk, upon limber stems which are inclined to droop.

This Fleabane follows Robin's Plantain in the succession of June flowers, and bears a general resemblance to the other plants of its genus, which renders it difficult to distinguish individually from its fellows.

DAISY FLEABANE : E. Philadelphicus.

Golden Rag-wort. *Senecio aureus.*

Squaw-weed.

Found in May or June in pasture lands.

The stalk, which grows from 1 to 3 feet high, is single, somewhat rigid in bearing, leafy, hollow, and woody-fibred, with a grooved surface. Its color is green, with dull brown streaks.

The lower leaves are simple, and round or heart- or lyre-shaped, with toothed margins, and are set on long stems; the upper leaves are long and narrow, their margins deeply cleft, and are set upon the stalk, partly clasping it. The texture is thin, and surface smooth. A rich green in color.

The bloom is small, of a deep orange hue; it is gathered in a close head, surrounded by 6 to 14 short rays, which have slightly notched tips, are of fine texture, and are an absolute orange-yellow color. The heads are set in a smooth, deep cup, of a yellow-green color tipped with red; they are arranged, on long slender stems, in a loose terminal cluster.

Occasionally the flower-stems bear thread-like leaves; sometimes the grooved stalk is slightly twisted. The leafage is inclined to curl, and with its fine deep notches presents a feathery appearance. The foot-tuft of leaves is interesting in arrangement.

GOLDEN RAGWORT : Senecio aureus.

May-weed. *Anthemis Cotula.*

Pigstye Daisy (Mass.).

Dog Fennel.

Found through the summer, from May to October, growing about buildings, or in waste places.

The stalk is seldom a foot in height, branching in a bushy fashion, and very leafy; it is slender but tough-fibred, and smooth. In color light green.

The leaf is small and indeterminate in shape, it is cut so deeply and irregularly as to present an aspect of being all fringed margin and no leaf; the midrib is strong, and the texture coarse. Color, light green. The leaves are set alternately and close together upon the stalk or branch.

The flowers are small and yellow, arranged in a flat disc, surrounded by a sparse number of oblong, notched, white rays. The leafy cup, which holds the flower-head, is dry and husk-like. The heads are terminal, and single.

This is a plant of communal habit, and profusely flowering. It has a trick of folding down its rays at night, and is a great sluggard about spreading them in the morning. After the rays age and fall, the disc becomes cone-shaped. "It has taken up its place by the roadside, close to the ruts—in bad taste." (Thoreau's Journal for June 25, 1852.)

MAY-WEED: Anthemis Cotula.

Dwarf Dandelion. *Krigia Virginica.*

Found from May to August on sandy banks and roadsides, and in pastures.

The several flower-stems rise from a mat of root-leaves; they vary from 3 to 10 inches in height, and are very slender, hairy, and green.

The earlier leaf is round, with an entire margin, and set on a very short stem; the later is oblong and narrow, with a sometimes notched margin, and scattering hairs upon the edge, and a thin texture. The color is light green. Later in the season a few slender leaves are found on the flower-stems.

The flowers are all ray flowers, 12 to 20 in number, small, with very finely-notched tips; rich orange, yellow in color. The cup which holds the head is small and tubular; its spreading row of tips is a little shorter than the rays; green in color.

The dark seed with its 5 or 7 rounded scales and an equal number of long thread-like white bristles is a charming feature of this delicate little plant. Sometimes the flower-stems fork, and bear two heads.

DWARF DANDELION : Krigia Virginica.

Ox Eye Daisy. *Chrysanthemum Leucanthemum.*

White Weed.

Bull's Eye.

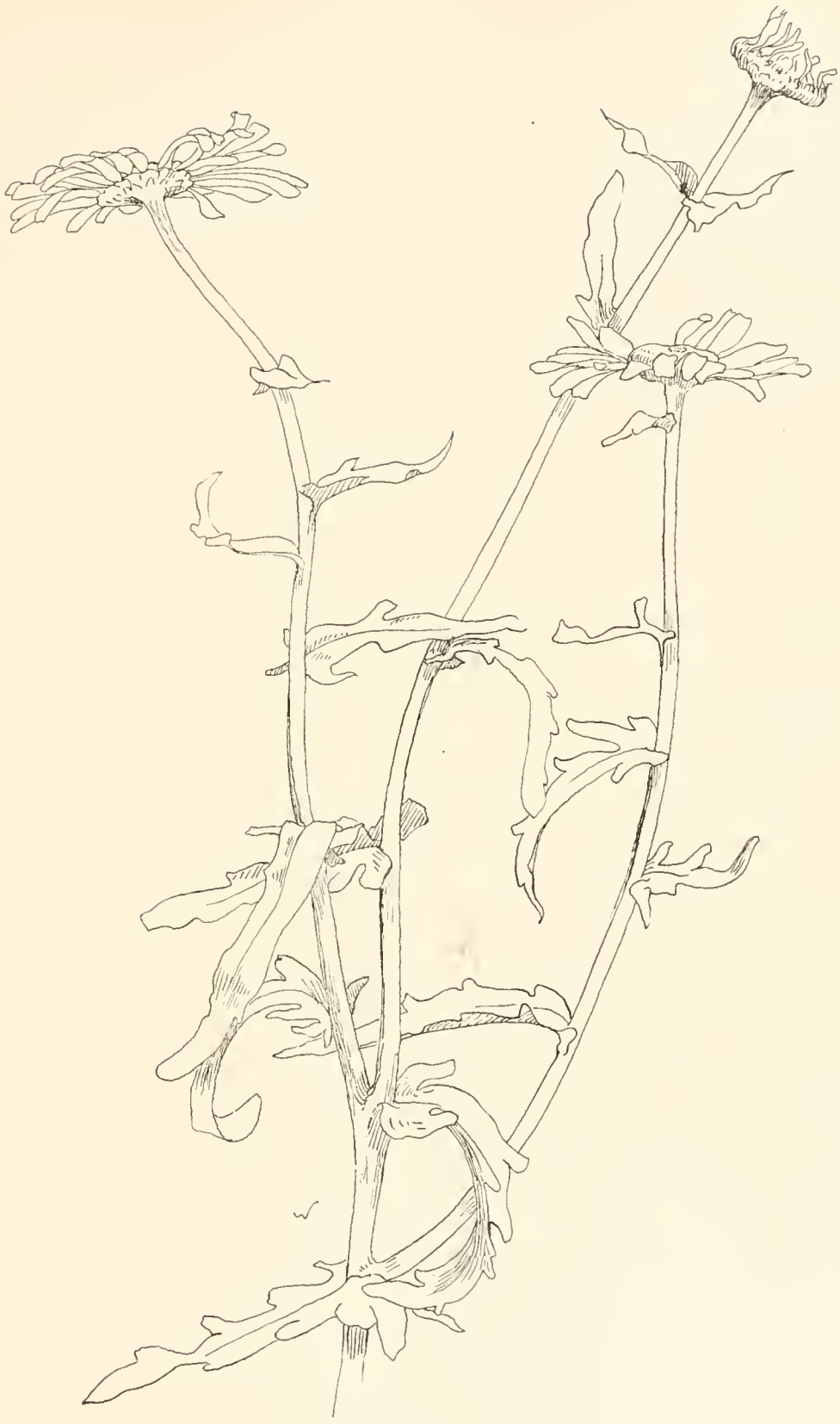
Found from June to October in fields, meadows, and roadsides, growing most abundantly in poor soil.

The stalk, whose height varies from 10 to 18 inches, is often single but sometimes sparsely branching, and bears but few leaves ; it is of a tough fibre, sometimes grooved, and smooth. Light green in color.

The root-leaves are round-tipped, infrequently cut, and are set on stems ; the upper leaves are very irregular in shape, and capriciously cleft or cut ; the margins are entire, the texture tough, and the midrib strong. They clasp the stalk at intervals, alternately. Green in color.

The flowers are small, tubular, and yellow ; they are packed evenly in a disc shaped liked a flat button (it becomes more conical with maturity), surrounded by a single row of about 25 rays. These rays are noticeably long, of a fine texture ; pure white in color. The flower-head is supported by a mat of green taper-pointed bracts, whose tips are often rusty ; it is set singly on the summit of the stalk.

This sturdy colonizer, the farmer's pest and children's delight, frequently usurps a whole field, where it thrives and blooms till frost-time in spite of draughts or flood. Double Daisies and conical-shaped discs are occasionally found, besides other variations from the regular order. The leafage is interesting, and individual in gesture.



OX EYE DAISY : Chrysanthemum Leucanthemum.

Early Hawkweed. *Hieracium venosum.*

Rattlesnake-weed.

Found in June in the shade of dry woods, or on barren hilltops and pastures.

The flower-stem springs from a rosette of foot-leaves; it grows from 1 to 2 feet high, bears but one leaf midway, and is smooth and shining. Of a light green color, with flecks of crimson at the leaf, and near the foot.

The foot-leaf is large (from 1 to 3 inches long), a long oval with a pointed tip, the midrib is wide, flat, and hairy, the prolonged base, or short stem, is partly clasping; the margin is entire and fringed with gray hairs, the texture is leathery. In color a dull light green, while the edge, ribs, and underside are red-purple. The single leaf on the flower-stem is long, narrow, and smooth; of a dull green color.

The flower is like a ribbon (or "strap-shaped") with a finely notched tip; of fine texture, and smooth. The color is a bright Dandelion yellow. 20 or more of these flowers are arranged in a spreading head, enclosed in a leafy light green cup, whose tips are tawny-red. The heads are set on long, slender stems, which fork from the main stem, with a tiny leaf sitting at the point of junction.

This jaunty plant, though found in the open, likes also the shade, where yet it never fails to swing its yellow heads out towards the sunshine. Sometimes the foot-leaves are wanting, and the flower-stem rises from the bare ground.

EARLY HAWKWEED : Hieracium venosum.

Canada Hawkweed. *Hieracium Canadense.*

Found, during August and September, growing along roads and thickets in dry shade.

The stalk, which grows to 2 or 3 feet high, is simple at first, but branches above, and is leafy; it is round, hard-fibred, smooth—but downy near the flowers. In color a light green, pale near the foot.

The leaf is a long lance shape, pointed at the tip and broad at the base, with a prominent strong midrib, the margin sparingly and sharply toothed; of a firm texture, and smooth. The color is a medium green, silvery underneath, the midrib light. It is set close upon the stalk, slightly clasping it; the arrangement is alternate. The length of the lowest leaves (sometimes 4 inches) decreases gradually, to that of a tiny thread at the spring of the flower-stems.

The flowers are finely notched at the tip; of a bright pure yellow color. The noticeably protruding two-tipped pistil is tawny-gray. The flower-head is large and spreading; its green cup is smooth and close-folded. The heads, on slender, downy, green stems, each of which bears a single leaf, are arranged in a loose terminal cluster.

Like all the Hawkweeds the Canada loves not solitude, but grows in gay encampment along a shaded road, where travellers welcome its strong absolute yellow, that is yet tempered to pleasing softness of tint by the many little gray pistils.

CANADA HAWKWEED : H. Canadense.

Tawny Hawkweed. *Hieracium aurantiacum.*

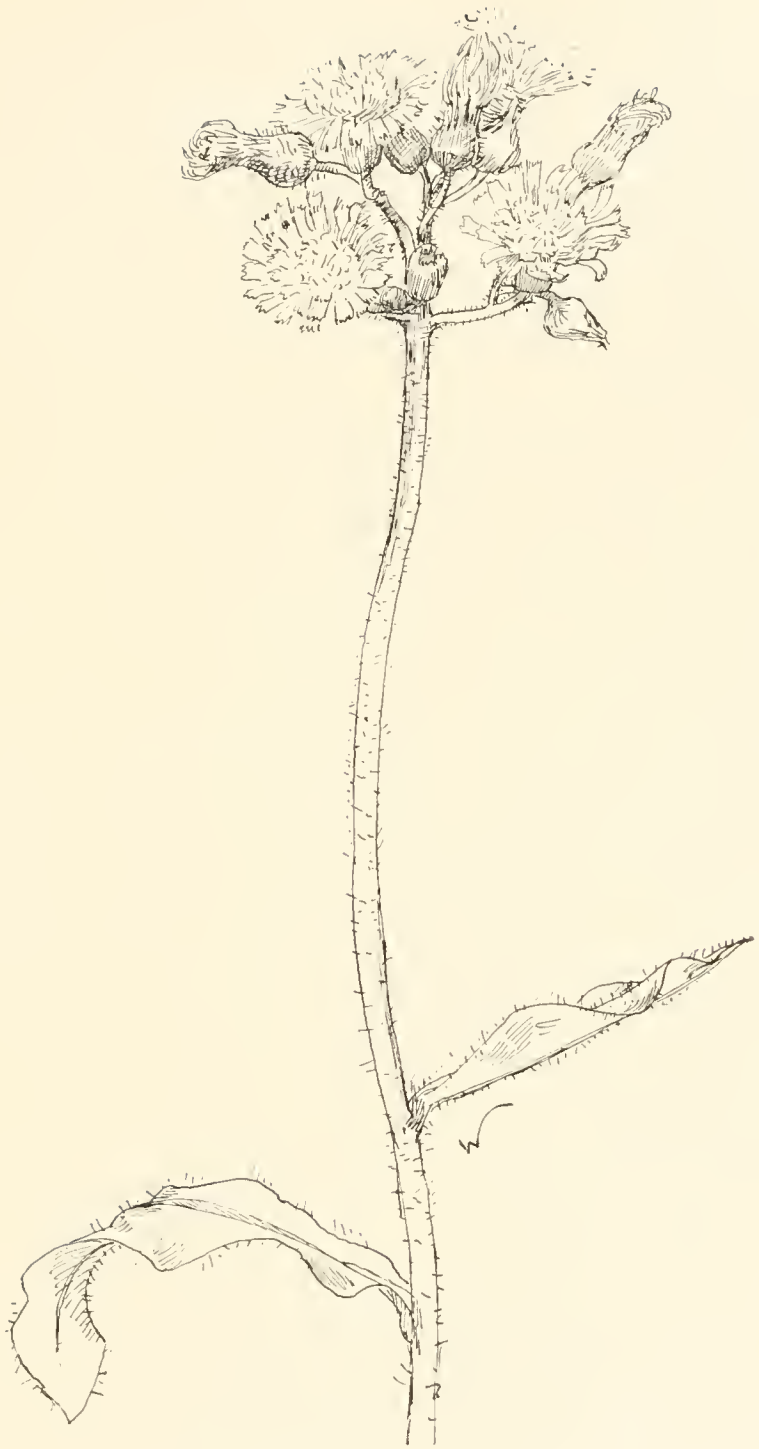
Found in June, in open fields and roadways.

The flower-stem rises from a rosette of foot-leaves; it bears one or two leaves near the ground, is slender, round, grooved, and hairy. The hairs are dark enough to somewhat obscure the green color of the stem.

The leaf is long oval, with an irregular margin, and strong midrib; the texture is coarse, and both upper and under surfaces are covered by long gray hairs. The color is green, with a lighter midrib. One or two leaves occur upon the flower-stems,—they are smaller than the others.

The tip of the slender "strap-shaped" flower is more finely fringed than is usual with the Hawkweeds. In color an orange-red, or tawny, rather dark in hue, while the pistil is bright yellow. The cup is green, with many dark tawny hairs. The heads are set on short stems in a terminal cluster.

This is the flower commonly known in England by the folk-name of "Grim the Collier," because of the dark and hairy aspect of its blossoms; the hairs near the flower-heads are of noticeable length and modify their color perceptibly. It is to be noted that the heads are composed of fewer colors than most of the common Hawkweeds. The plumy seeds are of a yellow-gray color and very pretty. Although the botanical calendar places the flowering time of the Tawny in June, personal observation has only noted it in the autumn; during middle September it is to be found in full bloom in northern Vermont.



TAWNY HAWKWEED : H. aurantiacum.

Hairy Hawkweed. *Hieracium Gronovii.*

Found, in August and September, in dry pasture lands.

The stalk branches only for the flowers, and varies from 12 to 16 inches in height; it is round, and slender, roughened by short small hairs, and is somewhat zigzag in manner of growth. Of a green or reddish-purple color.

The leaf is oval, pointed at both ends, with an entire margin, and strong midrib; both surfaces are rough and woolly. The color is green. The lower leaves are sometimes 4 inches in length, and narrow. The leaves are set immediately upon the stem, at long intervals.

The flowers are slightly notched at the tip. A strong yellow color. The cup is vase-shaped, hairy; and green. The heads are set on slender, rough-hairy stems, and arranged in a terminal cluster; a small leaf occurs at the junction of the stems.

The blossoms open only in the broad sunlight, and when plucked wilt quickly, thus losing their chief charm, a jaunty carriage.

HAIRY HAWKWEED : H. Gronovii.

Wild Lettuce. *Lactuca hirsuta.*

Found on waysides, and edges of thickets, in July.

The simple leafy stalk grows to be 3 or 4 or 5 feet high: it is hollow, and large, with a strong fibre, a thick, milky and bitter juice, and a tough skin whose surface is somewhat hairy. The color is usually a dark purplish-red.

The long leaf is deeply cut, or lobed, even almost to the wide midrib,—the lobes pointing toward the base of the leaf,—the tip taper-pointed; the upper leaves are slightly or not at all lobed; the surface is smooth above, sometimes hairy on the underside of the midrib. The arrangement is alternate, the leaves partly clasping the stalk. In color a full green, the midrib of the lower leaves a dark reddish-purple.

The minute flowers are collected in small heads, set in vase-shaped green cups; their color varies from a light, dull lavender, to a dingy white. The heads grow in branching clusters from the summit of the stalk.

The stout, tall, dark red stalk and broadly veined leaves make this a conspicuous inhabitant of the roadside: its small flowers however do not seem to fulfil the promise put forth by this vigorous growth. The dark brown, flattened seeds have fine, white, dandelion-like plumes.

WILD LETTUCE: Lactuca hirsuta.

Wormwood. *Artemisia Absinthium.*

Found during July and August along roads and lanes.

The stalk grows from 2 to 3 feet high, and is branching, and shrubby; its fibre is strong, it is slightly grooved, and silky to the touch. In color silvery green.

The rather small leaf is often divided to the midrib, the divisions being long and narrow; the surface is smooth, with fine silky hairs. Color, silvery green. The leaves are set upon the stalk in clusters, alternately; they have an aromatic scent.

The flowers are very minute, of a pale yellowish-green color, and clustered in small hemispherical heads, in pale green cups; their heads, nodding along the sides of the slender branchlets, form long terminal spires.

This Artemisia, though escaped from the garden, has taken most kindly and naturally to the common road, where its light silvery sheen renders it quite distinct from the surrounding growths. It has an agreeable pungent odor, resembling that of the Chrysanthemum, though much stronger, and it is very bitter to the taste.

WORMWOOD : Artemisia Absinthium.

Tansy. *Tanacetum vulgare.*

Found in July and August, chiefly along walls and fences, although occasionally in fields.

The stout and sturdy stalk, which grows to be sometimes 4 feet high, is branching and leafy, tough-fibred, round and smooth. Of a rich, light green color.

The large and long leaf is so deeply cleft into many narrow, oblong divisions, and the margin is so regularly toothed, that it bears the appearance of a curly feather; the vigorous curving midrib is an important feature; its texture is coarse, and it is pungently odorous. The color is a full, rich, dark green.

The flowers are very small, of a strong, full yellow, tending slightly toward green; packed tightly into a flat head, like a button with a little dent in the middle. The heads, enclosed in a shallow, yellow-green leafy cup, are set on slender, light green stems, and arranged in large, loose terminal clusters.

Growing in thickly-settled communities the Tansy plant forms a well known member of the roadside tenantry with its noble dark foliage, luxuriant and usually free from blight, and strong stalks topped profusely by the flower clusters, whose yellow is toned to a remarkable harmony with green. On a hot day the smell of the Tansy may be perceived at a considerable distance. "In the spring time are made with the leaves hereof, newly sprung up, and with eggs, cakes or Tansies, which be pleasant in taste, and goode for the stomacke," says Gerarde, and echoes of rules for Tansy-cakes come to us from the records of early New England house-wives.

TANSY : Tanacetum vulgare.

Composite Family.

Black-Eyed Susan. *Rudbeckia hirta.*
Cone Flower.
Coreopsis.
"Yellow Daisy."
Golden Jerusalem (N. H.)

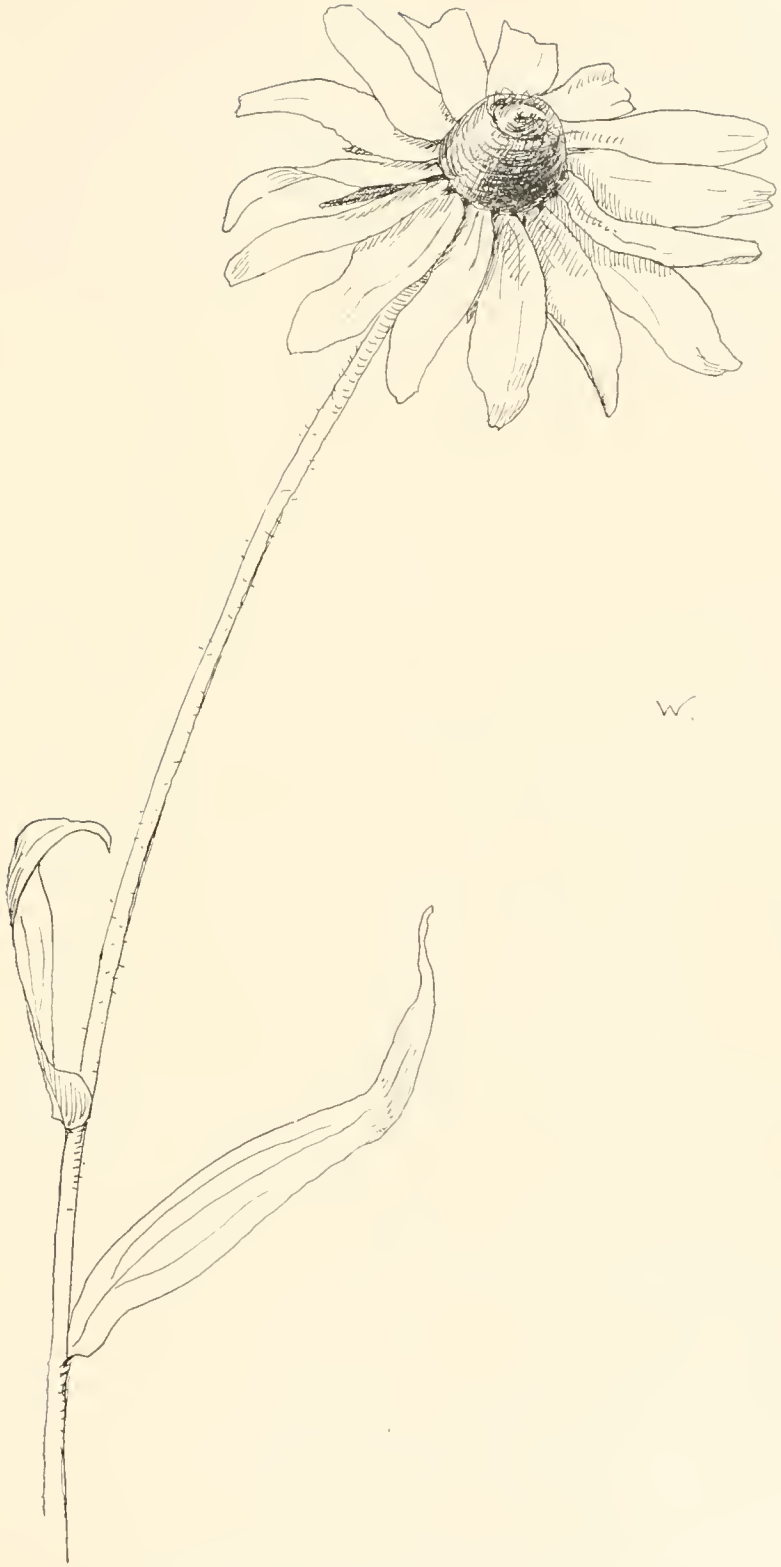
Found in sunny meadows and grass fields during July and August in great profusion.

The stalk (from 1 to 2 feet high) is very erect, sometimes bears branches, and is sparingly leafy; it is strong-fibred, coarse-textured, and hairy. The color, light green, is often brownish near the foot.

The leaf is long and narrow, with a fine-pointed tip, and an entire margin; the texture is loose, and the surface rough. The color is yellow-green. It slightly clasps the stalk. The leaves are arranged sparsely and alternately.

The minute flowers, of a rich, deep purple-brown color, are packed smoothly and closely in a cone-shaped head, the base of which is surrounded by a single row of 12 or 15 rays; these rays are over an inch long, and are sometimes one-half wide, they are blunt-pointed with a notched top, their texture is silken and faintly shows the veins, and their color is of a noble full yellow. The head is set upon a mat made of a double row of overlapping, small, green parts, and is borne singly on the summit of the stalk, or branch.

A ruthless invader of mowing lots where it makes a brilliant patch of color that may be discerned from afar, the farmer wages war on this handsome flower. It is not unusual to find it indulging in odd variations upon the established habit of blossoming, such as doubling the rows of rays, or with two or three heads bunched together, or set atop of one another.



BLACK-EYED SUSAN : Rudbeckia hirta.

Thoroughwort. *Eupatorium perfoliatum.*

Boneset.

Found in roadside thickets, and the borders of copses, during July and August.

The simple stalk, commonly about 2 feet high, sometimes grows to the height of 4 feet; it is large, strong-fibred, round, and hairy to the touch. In color pale green.

The leaf is lance-shaped, with a long fine-pointed tip, and united at the base to the opposite leaf, completely encircling the stalk as though strung upon it; the margin is finely notched, the midrib stout, with many veins showing; the upper surface is rough, the underside is hairy. The color is a strong green. The pairs of leaves are set at right angles with each other, and at a considerable space apart.

The flowers are small and feathery; greenish white. They are gathered in small tuft-like heads, and arranged in loose, leafy, terminal clusters, on short, stout, pale stems.

A charming kink in the outline marks the joining of the leaves. The pleasant perfume of the blossoms is proclaimed by the frequent visits of the bees. Sometimes the flower-cluster spreads to an unexpected size; personal measurement has discovered a plant, but 18 inches in height, whose clustered bloom was fully a foot across.

THOROUGHWORT : Eupatorium perfoliatum.

Eupatorium. *Eupatorium ageratoides.*

White Snake-root.

Found in rich moist soil, along the edges of woods and shaded roads, in August and September.

The stalk (from 2 to 4 feet high) branches a little, and is leafy; it is large, strong, fine-fibred, and smooth. In color, pale green, tinged with dull purple.

The leaf is large, broadly oval, taper-pointed, and widest at the base, with 3 marked ribs, a coarsely toothed margin, a thin texture, and smooth surface. The leaves are set on short stems, and are placed opposite each other on the stalk. The color is green.

The minute flowers, and projecting pistils, are white; and grouped in small heads, enclosed in vase-shaped cups of green, on short stems. The heads are arranged in close, rather flat-topped clusters on the top of the stalk, and springing from the angles of the upper leaves.

This plant comes into bloom in company with its next of kin, Joe Pye and Boneset; it thrives well under cultivation, and certainly is worthy of a better name than "Snake-root,"—which is, perhaps, the reason it is so generally known by "Eupatorium," the generic name it shares with so many others. It is much frequented by some small creature who leaves a pale labyrinthine trail etched on the broad surface of its leaves.

EUPATORIUM : E. ageratoides.

Joe Pye Weed. *Eupatorium purpureum.*

Trumpet Weed.

Found in moist grounds, ditches, and meadows, during August and September.

The erect, single, and leafy stalk varies from 4 to 8, or even sometimes 9, feet in height; it is large, and stout, and roughish to the touch. The color is a dull pinkish-purple.

The leaf is large, and oblong, tapering at both ends, the tip becoming a long slender point; the margin is notched, the ribs form a stout netted framework, the texture is coarse, and the surface is roughened. The leaves are set on very short stems, and arranged in whorls, of 3 to 6, about the stalk, at regular intervals. In color they are a strong vigorous green, the ribs often tinged with purplish-pink.

The small tubular flowers, and projecting thread-like pistils, are, in color, a light pinky purple; they are grouped in small heads, whose cups, and short foot-stems, are of the same color. The heads are arranged in thickly branching, large, more or less flat-topped, terminal clusters.

Joe Pye is a striking plant, of vigorous growth, whose large whorls of leaves are full of sweeping curves. Out of the sunlight and close at hand the flowers seem a little dingy in color, but by the wayside it is pleasing in tone. Why "Joe Pye"?

JOE PYE WEED: E. purpureum.

Common Thistle. *Cnicus lanceolatus.*

Found in pastures during July and August.

The branching, leafy stalk is 1 or 2 feet high; large, round, and tough-fibred; covered with white wool. In color, green.

The leaf is long, and narrow, tapering to a long point, with a large, stout, and curling midrib; the margin is deeply, and often cut, and armed at every point by strong, stiff, thorn-like spines. The texture is tough, and the upper surface is prickly, while the under is woolly with web-like hairs. The leaf clasps the stalk, and hugs it for a full inch or more before it springs away with a free curve; the lobes are ruffled, and flaring, as they lie along the stalk. The arrangement is alternate, and rather near together. The color is green, lighter at the midrib.

The flowers are small and silky; in color a beautiful deep crimson, tending toward violet. Many flowers are gathered into a large round-topped head, that is held in an admirably shaped green cup, which is protected by many, long, needle-pointed, white spines. One or two flower-heads occur together on the summit of the stalk, or branch. Their perfume is delicious.

This might well be named the Warrior Thistle, being armed *cap-a-pie* for conflict with cows and boys, and nearly impregnable against them. It loves to sit beside a boulder in the midst of cow-path, or bye-lane, and defy intercourse with any, save the bumble-bees, who sleep upon the silken flower o' nights. Special observation should be given to the classic vase-shape of the cup.

COMMON THISTLE : Cnicus lanceolatus.

Pasture Thistle. *Cnicus pumilus.*

Bull Thistle.

Found in dry pastures, uplands, roadsides, during July and August.

The erect, and somewhat branching, stalk varies from 1 to 3 feet in height; it is sparingly leafy, very large, and stout of fibre, and round; hairy to the touch. Color, green.

The leaf is long, and narrow, with a stout midrib; the margin is cut frequently but not deeply, each joint being tipped with a spine that is not so long as those of the Common Thistle; the texture is strong-fibred, the upper surface rather smooth, the underside covered with cobwebby hairs. The color, green. The leaf somewhat clasps the stalk; and the arrangment is alternate, at some distance apart.

The silky flowers are crimson-purple, less strong in tone than the Common Thistle; spreading softly, in a large, rounded, downy head, from the large cup. The cup is a fine urn-shape, closely covered with short prickles; green in color; with a few small leaves at the base. One to three flower heads rise from the summit of the stalk, or branches.

Larger (the flower-head is often nearly two inches across), but less ferociously equipped than the Warrior Thistle, this carries a sweeter perfume, and is the beloved of the bees. Especially is the flower-head lovely in color.

PASTURE THISTLE: C. pumilus.

Canada Thistle. *Cnicus arvensis.*

Found, during July and August, in lanes and fields.

The stalk is branching, and leafy, and from 2 to 3 feet in height; it is large, tough in fibre, and grooved. Its color is grayish-green.

The leaf is narrow, and sharp-pointed, the margin deeply notched, and much ruffled, and bristling in all directions and from every notch with short, sharp spines; the strong midrib is lighter in color than the grayish-green leaf. The leaves, set immediately upon the stalk, are alternately placed.

The small tubular flowers are 5-pointed, and the thread-like stamens and pistils are prominent; their color is lavender, while the stamens and pistils are white. They are gathered into tufted heads, enclosed in a gray-green vase-shaped cup, that is protected by short weak prickles; they grow in loose, branching clusters on the top of the plant.

This Thistle grows in great communities, spreading rapidly, and justly considered a pest by the farmer. The mass of its lavender colored bloom in its prime is pleasing to the eye, but later it develops an unkempt and weedy aspect, more befitting its character of an unwelcome tramp. Its flowers are sweet scented, and much sought by bees and butterflies.

CANADA THISTLE: C. arvensis.

Spiny-leaved Sow Thistle. *Sonchus asper.*

Found in cultivated fields, and along roadsides, in August.

The stalk is either simple, or branching near the top, from 2 to 3 or 4 feet high, large, round, and very hollow like a tube, and juicy; it is grooved, and smooth to the touch. The color is green, sometimes streaked with red near the foot.

The leaf is very long (sometimes 10 inches), lance-shaped with a tapering point, and noticeable rounded wing-like bases; the margin is deeply and irregularly toothed, and the edge is rolled under, thus making the teeth sharp-pointed, and stiff, like little spines; the midrib is prominent beneath, wide, flat, and pale above; underneath many veins show; the texture is thin, and the surface is smooth. The upper side is a cool clear green, the underside silvery, with a pale bloom. It is clasping, the prolonged bases flaring like wings on either side of the stalk.

The flowers are tiny and downy; light yellow in color; gathered in a flat-topped head (which is less than an inch across), enclosed in a small vase-shaped, green, and leafy cup. The heads are set on slender stems, in loose terminal groups, or singly on short leafy stems from the angles of the leaves; at the junction of these foot-stems small, oval leaves occur.

Nothing could be more suggestive of decorative design than the fine arch and spring of this leaf, with its ornamental winged clasps; and its refinement of color is an added excellence. The highly inappropriate folk-name (it is said to be a favorite article of diet among the English swine) should be abolished, and the plant called instead The Gothic Thistle in memory of a school who could appreciate its sculptural significance better than the moderns.

SPINY-LEAVED SOW THISTLE : Sonchus asper.

Common Sow Thistle. *Sonchus oleraceus.*

Found in fields, and cultivated lands in August.

The stalk varies in height from 1 to 4 feet; it is single, and leafy, somewhat twisting, tougher in fibre than *S. asper*, hollow, with a milky juice, and smooth. Color, a cool green.

The curiously cut leaf (about 6 inches long) is divided into a large triangular tip, a pair of acute-angled flaring side divisions, and narrow long-pointed bases which project like sharp-pointed wings beyond the stalk they clasp. Occasional leaves are not cut, and are merely lance-shaped. The midrib is flat above, and round beneath; the margin is toothed, with fine, weak spines; the texture is firm, and the surface is smooth and shining. Color, a fine cool green, the underside silvery with bloom. The arrangement is alternate.

The flowers are similar in color, size, and arrangement to *S. asper*. The foot-stems are sometimes bristly with short hairs, and at their junction occurs a long-pointed, small leaf, whose margin is entire. Below the flower-cluster the stalk is bare for a considerable space; single flower-heads spring from the angles of the leaves the greater part of its height.

The immature flower-heads are wrapped in a woolly blanket. The leaf is something like a Dandelion's in shape, and interesting from a decorative point of view. These plants are said to be common to many countries,—Europe, Africa, and New Zealand. In the last-named region an old traveller says the parrots "of beauteous dyes, but odious accents" feed upon it.

COMMON SOW THISTLE ; S. oleraceus.

Chicory. *Cichorium Intybus.*

Succory.

Blue Sailors.

Found, from July to September, growing in dry waste places.

The stalk, which varies from 2 to 4 feet in height, is branching, and leafy, rather large, stout and tough of fibre, and rigid in growth; it is grooved and hairy. The color is gray-green.

The leaf is not large, oblong in shape, with a sharp tip; the margin is slightly notched, with spreading hairs along the edge; the midrib is strong and the surface is hairy; the gesture curving, or wavy. In color, gray-green. The lower leaves are sharply cut at the base. The arrangement is alternate, and the leaves clasp the stalk.

The flower is "strap-shaped," rather broad, with a finely notched tip; the texture is very fine and thin, and the surface is shining and smooth. The color is an exquisite gray-blue or lavender, sometimes inclining to lilac, or even to pink. The flowers are arranged in heads, composed of several rows, spreading from a leafy green cup, which is closely surrounded by 4 or 5 little leaves (or "bracts"): all these parts being hairy. The heads are set close to the stalk in groups of twos and threes, in the angles of leaves, or singly on short stout stems.

These charmingly colored blossoms are scattered all along the stalks and branches, beginning near the foot, where they first open, not more than a few being in perfection at once. This scantiness of bloom and the stiff weediness of its growth make the Chicory plant less loved than it deserves for the peculiar beauty of its blue flowers. It grows most profusely near the seaboard, and in vacant city lots or neglected door-yards it bravely tries to hide the ugly remnants of civilization thrown aside by man.

CHICORY : Cichorium Intybus.

Burdock. *Arctium Lappa.*

Found, during August and September, along roads and in barren fields.

The stalk branches much, and is very leafy, with a bushy habit of growth, between 2 and 4 feet in height; it is large, stout-fibred, round, grooved, and rough to the touch. The color is light green, showing the red-purple tints of the flowers in streaks, especially at the junction of the stems.

The leaf is very large; the foot-leaves (often over 12 inches long) are rudely heart-shaped, and much puckered or fulled on the midrib, the upper leaves are smaller, and oval; the ribs show underneath in bold relief, the veins being like a strong network; the margin is entire, the texture coarse, and the surface rough. The color is gray-green, lighter underneath, while the midrib is pink above, and paler beneath. The leaves are set on stout, trough-like, reddish stems, which clasp the stalk; the arrangement is alternate.

The flower is very small and silky, crowded into a soft tuft, enclosed in an urn-shaped burr, which is armed with row upon row of sharp out-spreading spines, long, hooked, and sticky. The color of the heads varies, from nearly white, to a deep rose-purple, or blue-purple; the burr is green, or purple. The heads are set on short stems in irregular terminal groups, or on the short branches.

As the flowers mature thread-like white pistils push forth; they open first on the rim of the head. Ranking a pest among flowers, the Burdock is loved by children for its sticky burrs from which they fashion variegated toys. Designers would do well to study its bold finely arching leaves. "So if you please we will take a leaf of burdock, the principal business of that plant being clearly to grow leaves, wherewith to adorn foregrounds."—Ruskin.

BURDOCK : Arctium Lappa.

Elecampane. *Inula Helenium.*

Found along roadsides in August.

Growing to the good height of 5 feet sometimes, this very large, and stout stalk is single and leafy, tough-fibred, but smooth to the touch. Colored green, with a beautiful purple-gray bloom.

The leaf is large; its heart-shaped base has prolonged points, and its tip tapers very much; the margin is irregularly scalloped, its ribs are many and strong, the midrib being large and prominent beneath, and so taut it puckers and pulls the blade; the texture is thick, and the underside is slightly woolly. The root-leaves are oval, and on long stems; the upper leaves are clasping, and alternately placed. Their color is a strong grayish-green, of a peculiarly fine, cool quality.

The flowers are small, and yellow, soon turning to tawny. They are set in a large disc, surrounded by many, narrow, bright yellow rays. The cup which holds the head is shallow and composed of many broad, curling or wavy, light green parts, which overlap each other in several rows; close beneath the cup occurs a small leaf. The head is set on a stem which bears a single leaf midway its length; two or three flower-heads are grouped together; they are placed terminally, and in the angles of the upper leaves.

Growing in large settlements, by the stone wall or Virginia-rail fence, Elecampane commands attention by its splendid vigor of growth, and the free curves of its fine leafage. In color too, it is highly suggestive of decorative purposes, for the excellence of its green, and the plum-gray bloom upon its stout stalk.

ELECAMPANE : Inula Helenium.

Life Everlasting. *Anaphalis margaritacea.*

Pearly Everlasting.

Moonshine (Vt.)

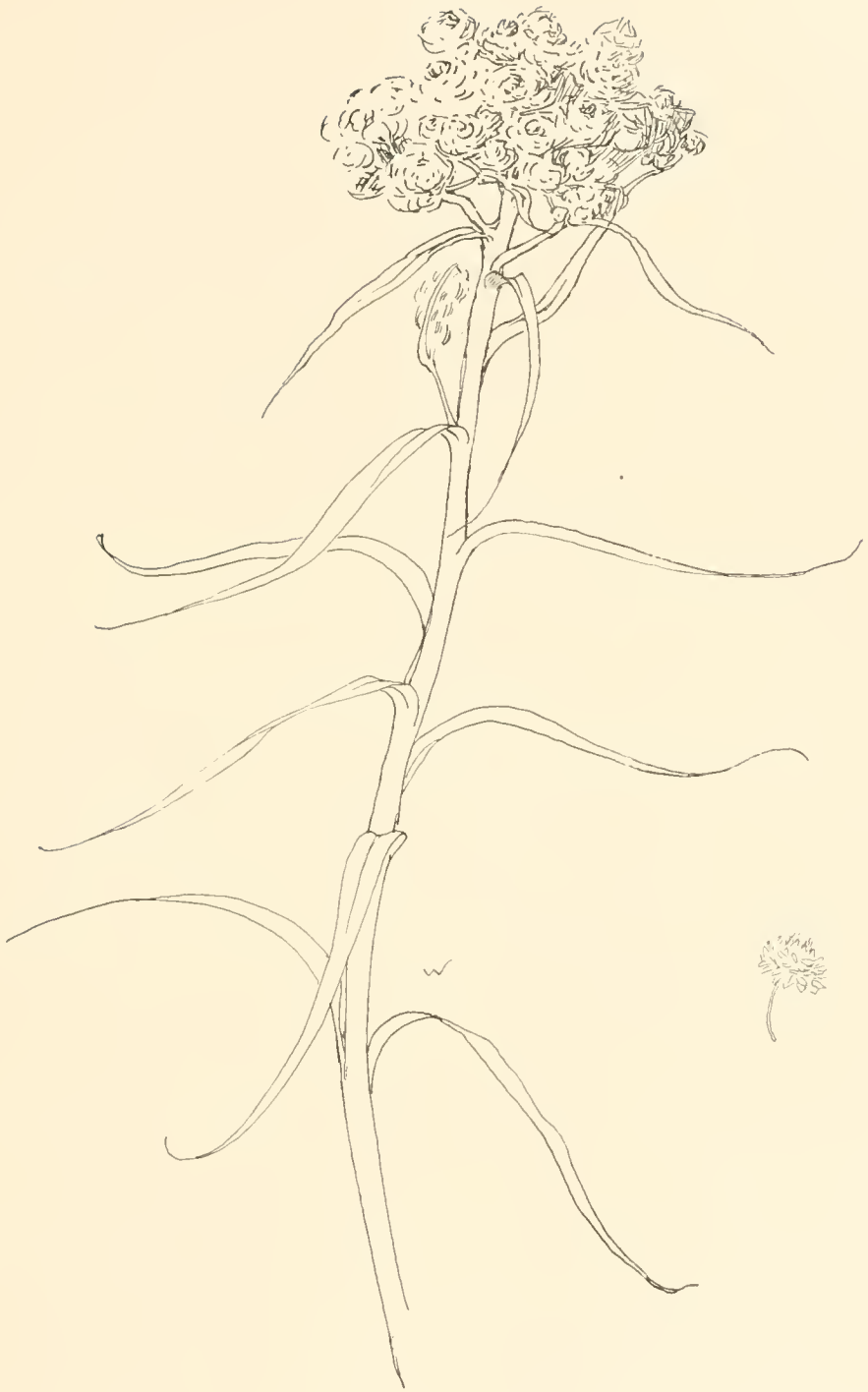
Found in July, August, and September, in roadside tangles, dry pastures and uplands.

The stalk which varies from 12 to 18 inches in height is branching, and leafy, round, woody-fibred, and covered with silky wool. Of a light green color, much modified by the gray-white wool, which is often tinged with brown near the ground.

The leaf is very long and narrow, with a pointed tip, the midrib is noticeably strong, and the margin entire; it is soft and agreeable to the touch, because of the silky wool which covers both upper and lower surfaces, and tempers its color to a light gray-green, somewhat darker than the stalk. The arrangement is clasping, alternate, and frequent.

The flower is very small and fuzzy; yellow, or tawny-brown, according to the stage of its maturity; it is arranged in small tufts, enclosed by many rows of tiny, dry, gray-white sheath-like husks, that enfold and guard it closely. The head is set on a short, downy, white foot-stem. Several (4 to 12) heads are gathered together upon a longer stem, and a few, or many, of these groups are arranged in a loose terminal cluster. Sometimes these clusters are very large,—measuring 6, or even 8 inches across.

A peculiar dry odorousness pervades the blossoms, and forms an essential feature of the charm this Everlasting possesses for its friends, a charm as undefinable as that which abides in the New England pastures, where it loves to dwell in thrifty fellowship with the Hardhack and Huckleberry bushes.



LIFE EVERLASTING : Anaphalis margaritacea.

Everlasting. *Gnaphalium polycephalum.*

Cudweed.

Found in August and September, in dry fields, and open roadsides.

The stalk grows from 1 to 2 feet in height; it branches near the top, and is leafy all the way, of a stiff fibre, with a woolly surface. The color is green, the wool whitish.

The leaf is long, and narrow, with a strong midrib, and entire, or slightly irregular, margin; the under surface is woolly. In color gray-green, whitish underneath, because of the wool. The arrangement is clasping, and slightly hugging the stalk; alternate.

The tubular flower is small, and gathered into a close tuft; of a dull, light, tawny color, which turns darker with age. The tufted head is held tightly within a deep cup, composed of many shining white sheaths. The heads are set on foot-stems, in groups of 2 to 8, and arranged in terminal clusters.

When the ripened downy seed is ready to fly away, the closely folded little cups open wide. A full pleasant fragrance belongs to the blossoms.

EVERLASTING : Gnaphalium polycephalum.

Yarrow. *Achillea Millefolium.*

Milfoil.

Found from July to September, in dry fields and roadsides.

The stalk, which is very erect in bearing, grows to be about 2 feet high usually; it is single, or branches near the top, and leafy; of a stout fibre difficult to pluck, round and grooved, and covered with wool which causes the green color to look whitish.

The leaf is long and narrow, deeply and finely cut into slender line-like divisions, these being also cleft 3 or 5 times which gives it a fringy appearance; with a strong midrib, and covered with white wool on the underside. The color is gray-green. It is clasping, and the arrangement is alternate, and often crowded into little tufts along the stems.

The flower is very small; pale brown, or bright cheese-colored yellow: crowded into a small thimble-topped head, and surrounded by 3 to 5 small, oblong, white rays, with finely notched tips. The head is held in a deep, pale green, or nearly white, cup, and set on a slender, leafy, white, or pale green stem. The heads are arranged in terminal clusters.

Generally the flower-cluster is noticeably flat-topped, even the small groups of the side branches strive to reach a uniform level with the central cluster. A friar-like gravity of hue shows this plant to be a typical New Englander, thriving with sturdy content on sterile soil, and sending forth a wholesome aromatic odor. In certain localities the rays are tinted pink, almost crimson.

YARROW : Achillea Millefolium.

White Lettuce. *Prenanthes alba.*

Rattlesnake-root.

Found on the borders of rich woods in August and September.

The erect stalk, from 2 to 4 feet high, branches near the summit, and is leafy all the way; it is large, round, and smooth. Color, green, or frequently a dark, rich, purplish-red, with a bloom upon it.

The leaves are variable in shape and size; the root-leaves are large, often and deeply cleft, and set on a 3- to 5-inch stem; the lower leaves of the stalk are broad, faintly notched or 3-cleft; while the upper leaves are long and narrow, with entire margins. Their texture is thin (when dried, like paper in quality), and their surface smooth. In color, a dark cool green.

The flower-head is composed of 8 or 12 small "strap-shaped" blossoms hanging from a cup; they are cream colored, tinged with lilac; the cup is composed of 8 narrow, pinkish-gray parts; the stamens are noticeable because their tips split and curl spirally,—they are cream colored also. A few small bracts occur at the base of the flower-head, which droops on a small stem. The heads are arranged in little clusters springing from the angles of the branches and leaves.

As the flower-head matures, there may be found within its nodding cup a bunch of fine reddish hairs, like a sable paint brush,—later this opens into a downy seed tassel. The fine stalk gives the plant a distinguished appearance.

WHITE LETTUCE : Prenanthes alba.

Rattlesnake-root. *Prenanthes altissima.*

Found during August and September on the edge of dark woods, and in damp places, that are shaded.

The stalk, often about 3 feet high, sometimes attains to more than man's stature; it is very erect, branches only for flowers, is leafy, round, firm-fibred, and smooth. Green in color.

The root-leaves are large (2 or 3 inches in length), wedge-shaped, or 3- to 5-divided; the upper leaves are smaller, varying from a wedge or heart-shape to a long-pointed oval. They all have entire, or faintly notched margins, and the midribs, shining above, are rough beneath. They are set on stems, which are sometimes provided with narrow spreading margins; the arrangment is alternate, with a certain interval between.

The flower is small, "strap-shaped," with a square notched tip; cream-white in color. 5 or 6 are included in a tubular cup, composed of a close-folded row of narrow, green or purplish, pale, leafy parts; these cups are set nodding on slight foot-stems, and arranged in small irregular groups, on short branches, which form a long, irregularly arranged terminal spike.

The blossoms are so small they are quite out of proportion to the height and strength of the stalk; their habit is scattering, and only a few heads open at the same time. The plant is most effective when all its stiff little downy seeds are spreading themselves for flight.

RATTLESNAKE-ROOT : P. altissima.

Bur Marigold. *Bidens cernua.*

Found through August and September in swampy grounds. It is very common, and grows from 1 to 5 feet in height.

The stalk is leafy and branching, large and tough-fibred, smooth, but grooved from the joints. The color is light yellow-green.

The long leaf is narrow, and tapering to a slender point; it is somewhat fulled upon the taut midrib, and the margin is irregularly notched, while the surface is smooth. The color is a strong yellow-green, lighter on the wide midrib. The leaves are opposite each other, and partly grown together about the stalk.

The small, tubular disc flower is dull tawny in color; the rays, usually 8 in number, are broad, and of a bright golden-yellow color. The large flower-heads are encircled by two rows of green, or greenish, bracts, the outer row being slightly twisted; they are somewhat nodding on short stems of equal length, and spring from the angles of the leaves.

The seed, armed with 4 stout prongs, and plentifully set with backward-pointing bristles, is familiarly known as "beggars' tick" or "stick-tight,"—it never loses a chance to catch a ride on the clothes of the unwary passer-by. Its smooth grooved stem, swelling at the joint, is an interesting feature of this otherwise rather coarse plant.

BUR MARIGOLD: Bidens cernua.

Rayless Marigold. *Bidens frondosa.*

Found in August and September, lying in wait for travellers along roadside ditches and in wet fields.

The stalk, which grows any height from 2 to 6 feet, bears branches in pairs; is very leafy, and stout, round, coarse-fibred, and slightly shining. In color, purplish green.

The leaf is divided into 3 or 5 lance-shaped parts; the margin is toothed, and the texture is coarse; it is set on short, ribbed stems, and springs from a noticeable joint, in pairs, at regular intervals along the stalk, and branches. It is dull green in color.

The flowers are very small, and ragged, of a dull tawny orange; they are crumpled tightly into a flat head, and sometimes partly surrounded by 1 to 3 inconspicuous, little, dull yellow, rays. The head is encircled by small, narrow, green, leaf-like parts of irregular lengths; it is set on a short green stem. Two or three heads are gathered in a terminal group.

The cup-like joint of the leaf-stems is worth careful consideration, it is so neatly finished. The seed is dark and shining, and oppressively civil in its attentions to heedless wayfarers.

RAYLESS MARIGOLD : B. frondosa.

Wild Sunflower. *Helianthus tuberosus.*

Jerusalem Artichoke.

Found through September and October, in cultivated fields, and along thicket borders.

The stalk branches for flowers near the top; it is leafy, large, from 3 to 7 or 8 feet, very stout, and rough with short hairs. Its color is light green.

The leaf is large, and oval, with a pointed tip and widest at the base, where it tapers into a short stem; the margin is somewhat obscurely notched, the texture is coarse, showing 3 strong ribs, and the surface is rough. The color is a full, strong green. In growth, the leaves are generally opposite, though the upper leaves are often alternate.

The disc flowers are small, tubular, and 5-pointed, of a dull yellow color; the stamens are protruding, spirally curled, and brownish; the rays, from 8 to 15 in number, are long, and broad, and colored a brilliant orange-yellow. The leafy cup, which encloses the head, is composed of several rows of green parts; the heads grow singly from the summit of the stalk, or by twos and threes, on stems, from the angles of the leaves. This is a towering plant, whose brilliant flowers and vigorous leafage render it an effective feature of the wild hedgerow. Its tuberous root is sometimes cooked as a vegetable, and in a raw state is eaten by men and boys.

WILD SUNFLOWER : Helianthus tuberosus.

Bushy Goldenrod. *Solidago lanceolata.*

Found during August, growing in open, dry fields, and waysides.

The stalk reaches about 3 feet in height; it is leafy, and branching widely, slender, and rough to the touch. Color, green.

The leaf is like a grass blade, very narrow and long, pointed at both ends, with an entire margin, and parallel veins; the texture is thin, the edge and midrib slightly rough. In color gray-green.

The disc flowers are few, the ray flowers very short, from 10 to 18 in number. The heads are arranged in small flat-topped clusters.

The branches are so nicely graduated in length that they form a large-topped flowery summit to the slender stalk, the buds opening in the center first. The green is tempered to a more perfect harmony with the yellow bloom than is usual among the Goldenrods, and the cup is of so yellow a hue it scarcely shows a trace of green.

BUSHY GOLDENROD : Solidago lanceolata.

White Goldenrod. *Solidago bicolor.*

Silver-rod.

Found in August and September growing in dry soil, often in light shade.

The stalk is noticeably erect, and usually single, of coarse fibre, and rough to the touch; 1 or 2 feet high Green.

The leaf is narrow, and tapering to a point at both ends, with a sharp tip. The margin of the lower leaves is notched, the upper leaves are entire. They sit close upon the stalk in alternate arrangement. The color is a homely green.

The rays are from 4 to 12 in number; and cream colored, like the disc flowers. The small heads are gathered in crowded groups, set in the angles of the small, pale, upper leaves, forming a long club-shaped spike.

Sometimes the plant is slightly hairy, and occasionally the lower leaves are oval in shape, and furnished with stems. The bloom begins at the tip of the spike, whose gesture deserves the name of "rod" more nearly than its more graceful sisters. If not well-nourished the blossoms are apt to be ragged, and dingy in color.

WHITE GOLDENROD : S. bicolor.

Plume Goldenrod. *Solidago juncea.*

Found in August and September, in grassy fields, growing to the height of 2 or 3 feet.

The graceful and elegant stalk is smooth, round, and shining. Color, light yellow-green.

The upper leaves are lance-shaped, long-pointed at either end, with entire margins; they spring from the stalk with a noticeable arch. The lower leaves are larger, more nearly oval, lengthening to a margined base or stem; they are sometimes sparingly notched. In arrangement alternate, with small leaves putting forth from the angles. Color, a yellowish-green.

The ray flowers are from 8 to 12 in number. The heads are arranged, in little spires, along the upper sides of slender stems, which form a long, spreading, curving plume.

This is perhaps the handsomest of the clan in growth. It dries well for winter decoration.

PLUME GOLDENROD : S. juncea.

Common Goldenrod. *Solidago Canadensis.*

Tall Goldenrod.

Found by the wayside, hedgerows, thickets and fields, everywhere; common: blossoming in August and September.

The round, leafy stem is stout and tall, sometimes reaching to the height of 6 feet; it is rough-downy, or hairy, to the touch, and of a light yellowish-gray color.

The oval leaf is long, tapering at both ends; usually notched on the edge, slightly rough above, and downy beneath; it is coarse in texture, and in the quality of its green color.

The flower-heads are small, and bright yellow; they grow on curving branchlets in a many-sided plume, on the top of the stalk.

COMMON GOLDENROD: S. Canadensis—$\frac{2}{3}$ life size.

Noble Goldenrod. *Solidago speciosa.*

Found during September growing in dry soil, near the woods often.

The smooth, round, single stalk varies from 3 to 6 feet in height. Its color is a fine dark red.

The leaf is long and narrow, and tapers at both ends; its margin is entire, the edge being a little rough, and the midrib is strong and curving, and a trifle taut, which fulls the blade; the texture is fine and thick, and the surface is smooth. The color is yellow-green. The leaves are set alternately upon the stalk.

The stamens of the disc flowers are long; the rays 5 or 6 in number; full-toned yellow in color. The heads are rather large, and are arranged in a large pyramid-shaped terminal spike.

A strikingly handsome plant, with its strong red stems, which color also tempers the green of its foliage into an excellent harmony with the numerous flowers. Its manner of growth in circular settlements of many plants together is a very individual trait.

NOBLE GOLDENROD : S. speciosa.

Small Spike Goldenrod. *Solidago nemoralis.*

Found in September along dry roadsides and in sandy fields.

The stalk, which seldom grows higher than 2 feet, is single, and very leafy, of a strong fibre, and slightly rough, or not quite smooth to the touch. It is grayish green in color.

Disc flowers are few, the rays are seldom more than 8 in number, arranged in little one-sided spires to form a close, leafy, spike-like plume. The color is very clear in hue.

Common to all localities favorable to the Goldenrods, and, as observed, reaching its fulness of bloom in September rather than in August.

SMALL SPIKE GOLDENROD : S. nemoralis.

Broad-leaved Goldenrod. *Solidago latifolia.*

Found in September and October on the edges of woods, and moist copses.

The stalk grows from 1 to 3 feet high; it is often zigzag in gesture or angular, is leafy, smooth to the touch, and woody-fibred. Its color is green.

The broadly-oval leaf tapers at both ends, the margin is cut in sharp slender teeth, ribs are marked, and the surface is rough to the touch. Color, yellowish green.

The disc flowers are small, and the ray flowers are few, from 4 to 6 in number; in color they are clear yellow. The cups are pale green, and the heads are gathered, in small clusters, on the end of the stalk, and in the angles of the upper leaves.

This is a pleasing variation from the common types of the Goldenrods: its prolonged leafy stem, slender in growth, and strung with small clusters of yellow flowers, is less showy, but more refined in general bearing than many others.

BROAD-LEAVED GOLDENROD : S. latifolia.

Wreath Goldenrod. *Solidago cæsia.*

Found, during September and October, growing in rich woods or on the borders of thickets.

The very slender, curving, stalk varies from 10 to 18 inches, or more, in height; it often branches near the end, and is leafy all the way; smooth. Clear green in color.

The leaf is long-oval in shape, tapering at both ends, with a sharp tip; it has a strong midrib, the margin is notched with sharp teeth, the texture is thin, and surface smooth. Green in color. The arrangement is alternate, the leaves being set on the stalk near together.

The ray flowers, 4 or 5 in number, are small; the little heads are clustered upon the stalk in the angles of the leaves for a considerable part of its length. The color is a pleasing yellow.

These slender, swaying, golden wreaths of bloom love best a shady wood road, though they bear transplanting into gardens fairly well.

WREATH GOLDENROD : S. cæsia.

Upland White Aster. *Aster ptarmicoides.*

Found among rocks, in dry soil, in August.

The stalk, erect in bearing, from 1 to 2 feet in height, is single, and very slender; smooth at the foot, though rough above. Of a gray-green color.

The leaf is like a grass blade, long, and narrow, with an entire margin, and noticeable midrib; the upper surface is rough, the edge being harsh to the touch, the under surface is shining. Color, gray-green. Arranged alternately, and clasping the stalk with an upward curve.

The disc flowers are small; of a pale yellow-green. The ray flowers, 15 or 20 in number, are short, pointed; pure white. The heads are arranged in a flat-topped loose cluster.

When the disc flowers mature they turn to a light brown color; at one period of development the pale pistils are prominent. There is an individual excellence about this Aster, existing especially in the curve of its leaf.

UPLAND WHITE ASTER : Aster ptarmicoides.

White Wood Aster. *Aster corymbosus.*

Found in moist woods during July and August.

The stalk, 12 or 15 inches high, branches near the top, and is sometimes zigzag in growth; slender, and smooth. In color a strong rich purple, or green, streaked with red or purple.

The lower leaves are heart-shaped, the upper long-oval, with tapering points; the margin notched, and the texture thin. Color green, lighter underneath. Set on short stems, and arranged alternately.

The disc flowers are few, and yellow; the 4 to 8 ray flowers are about a half inch long, narrow, delicate in texture, arranged in a scattering row, and pure white in color. The cups are small; the heads grouped in loose, leafy terminal clusters.

Perhaps the most daintily finished of the white Asters, it is also the most shy, loving shady nooks and lonely places amongst trees.

WHITE WOOD ASTER : A. corymbosus.

New England Aster. *Aster Novæ-Angliæ.*

Found in September in moist fields and waysides.

The strong stalk varies much in height (from 3 to 7 or 8 feet); it branches somewhat at the summit and bears many leaves, and is hairy to the touch. In color green, or purplish.

The leaf is lance-shaped, with a pointed tip, and a heart-shaped base, an entire margin, and hairy surface. The color is a fine, cool green. The leaves clasp the stalk closely, and are arranged alternately, and near together.

The disc flowers are yellow, inclining to purplish, gathered in a large, noticeable tuft; the ray flowers are large and long (15 to 20 in number), of fine texture, and of a rich deep violet or almost royal purple color. The cup is large, sticky, and its many tips turn abruptly outward; green in color. The heads are set on short, sometimes leafy, stems in small terminal groups.

A singularly handsome Aster, with a fine, free gesture, and admirable color harmony.

NEW ENGLAND ASTER : A. Novæ-Angliæ.

Starry White Aster. *Aster multiflorus.*

Found in August and September, in dry open fields, and waste places.

The stalk (from 1 to 2 feet in height) is leafy and shrubby in growth, and the branches are long and curving; it is slender, and rough to the touch. Green.

The lowest leaves are broad lance-shaped, pointed at each end, the margin sometimes notched; the upper leaves are long, and narrow, with an entire margin, and diminishing in size till they become line-like near the top of the stalk. The midrib shows plainly, the texture is firm. The color is gray-green, rather dark. The leaves are set immediately upon the stalk, closely and irregularly, and generally alternate.

The disc flowers are few; yellow, changing to brown. The ray flowers are fine and small, 10 to 15 in number; white. The cups very small; silvery green. The heads are arranged in profusion along the leafy branches.

The feathery prettiness of these curving spires of green and white loses nothing of its attraction because of its plentiful growth in barren places amidst the one-toned monotony of the Goldenrods. The quality of its green deserves especial regard.

STARRY WHITE ASTER : A. multiflorus.

Early Purple Aster. *Aster puniceus.*

Found in August in damp or swampy places.

The stalk varies from 3 to 5 feet in height, and is widely branching; the fibre is coarse, and it is roughened by hairs. The color is green, very often becoming purple near the foot.

The leaf is a long oval (near the foot sometimes fully 3 inches long), with strong and hairy midrib, and a slightly notched margin; the edge and upper surface are disagreeably rough to the touch. In color light green, the midrib sometimes purple. The arrangement is alternate.

The disc flowers are yellow, turning to tawny; the ray flowers (20 to 30 in number) are long, and of a delicate light purple. The cups are composed of several rows of long, fine, spreading green parts. The heads are arranged in small groups, set on short stems, which rise from the angles of the leaves.

Though somewhat awkward in manner of growth the blossoms of this early Aster are very pretty and profuse. The rays, as they lie folded in the bud, are silvery pale.

EARLY PURPLE ASTER: A. puniceus.

Pointed-leaved Aster. *Aster acuminatus.*

Found in August in rich woods (Mountains of Vermont).

It grows about 1 foot high, and has a slender, sometimes zig-zag stalk, which is slightly rough, and bears the leaves and flowers clustered at the top.

The leaf, from 2 to 4 inches long, tapers at tip and base, and is coarsely toothed on the edge; the surface is a little hairy, and the texture is thin; the leaves, set directly on the stalk, are alternate at short distances, giving the effect of a whorl of leaves. Color green.

The flower-head has from 12 to 18 long, narrow, rays, white or faintly tinted with violet, while the disc flowers are dull yellow. The flower-heads are apt to be few, on slender stems in a branching cluster, on the top of the stalk.

This Aster lacks richness of color, but has a certain charm of slender growth peculiar to wood Asters; its few pale flowers set above the full cluster of the broad pale leaves have an air of selection, unknown to its more luxuriant relatives.

POINTED-LEAVED ASTER : A. acuminatus.

Broad-leaved Aster. *Aster macrophyllus.*

Found in the woods in September, generally in upland regions.

The single, very stout growing, stalk is between 1 and 2 feet in height; it is slightly rough to the touch. In color light green.

The lowest leaves (generally 3 in number) are very conspicuous, being especially large, and nearly round, with a heart-shaped base, and a suddenly sharp tip; with many ribs, and the margins prettily cut in rounding scallops, with tiny sharp teeth; these leaves are set on long trough-like stems that clasp the stalk. The upper leaves become, very abruptly, quite small; with fine-pointed tips, entire, slightly and irregularly notched margins, and showing only the midrib; they are set on very short stems, or, near the flowers, are placed immediately upon the stalk. All the foliage is exceptionally thin in texture, and rough on both surfaces; the arrangement is alternate. The color is a fine gray-toned green.

The disc flower is small; yellow turning to brown; the rays, 12 to 16 in number, are long and slender, of a very delicate texture, and pale lilac (sometimes nearly white it is asserted) in color. The cup is cylindrical, and slightly sticky, as are the foot-stems. The heads are arranged in a loose, terminal cluster.

An odor of camphor mingles with the sweet scent of these flowers, and is distinctly perceptible at a distance. The decorative quality of the leafage is of unique excellence.

BROAD-LEAVED ASTER : A. macrophyllus.

Pine Aster. *Aster linariifolius.*

Found chiefly on the edges of pine woods in September.

The stalk reaches from 1 to 2 feet in height; it is single, leafy, slender, and rough to the touch. In color, pale green, tinged with red.

The leaf is long, and narrow, with an entire margin; the surface covered with a minute down that is harsh to the touch; the fibre is stiff. The color is green. The leaves are set upon the stalk, irregularly, alternating, and numerous.

The disc flowers are yellow; the ray flowers, 12 to 20 in number, are long and slender, and pale bluish-lavender in color. The heads are few, and grow, on slender stems, either singly, or in a terminal flat-topped cluster.

The stiff edges of the leaves and their rigid bearing are not unlike the needles which carpet the favorite haunts this Aster loves. Though not pleasant to pluck, on account of its harsh texture, this is a very attractive plant to look upon.

PINE ASTER : A. linariifolius.

Variable-leaved Aster. *Aster undulatus.*

Found in dry woods, and thickets, during September.

The slender, branching stalk (2 to 3 feet high) is soft, with down, to the touch. Light green in color. Leaning and swaying in gesture.

The leaves are very variable in shape, the lowest being decidedly heart-shaped, and set on long margined stems (these margins somewhat notched) that clasp the stalk with shallow wings; above, the leaves are somewhat heart-shaped, and are set on short stems, that clasp the stalk with broad wings; while the upper leaves are set immediately upon the stalk, and clasp it by their prolonged bases. All the leaves have tapering tips, entire, or very slightly, notched margins, with a rough upper surface, while underneath it they are soft-hairy to the touch; they are placed alternately. The color is cool green.

The disc flowers are pale yellow at first, but become reddish-brown in maturity. The ray flowers, 10 to 20 in number, are pale lavender or lilac. The heads are arranged in loose clusters.

The color of this leafage, and its shapes, are very pleasing. Gray's *Manual* states the color of its rays as "bright blue"!

VARIABLE-LEAVED ASTER : A. undulatus.

Later Purple Aster. *Aster patens.*

Found during September and October along the borders of dry woods and thickets.

The stalk (from 1 to 2 and ½ feet high) is branching, and leafy, with a fine texture, and smooth surface; slender and swaying in growth. Its color is sometimes green, often a dull reddish-purple.

The leaf is long, and narrow, tapering at the tip, and partly clasping the stalk at the base; the margin is slightly rough to the touch, the texture is firm and thick, and the surface is smooth to the touch. Color, a cool dark grayish-green. The arrangement is alternate.

The disc flowers are sometimes yellow, or often reddish-violet; the rays, from 20 to 30, are a deep rich violet. The heads are set in vase-shaped green cups, whose parts are over-lapping; they are numerous in large terminal clusters.

As the flowers mature, the rays curl inward around the disc, and dry thus on the plant; its leafage is very fine in quality, and in beautiful harmony with the rich brilliance of the blossoms.

LATER PURPLE ASTER : A. patens.

Branching Aster. *Aster cordifolius.*

Found in the latter part of September in shaded thickets and on dry banks.

The stalk is often about 4 feet high, very widely branching, leafy, and bearing a profusion of flowers; it has a coarse, very rough surface usually. In color reddish.

The leaf has a heart-shaped base, and pointed tip, a slightly notched or entire margin, and a coarse texture, the surface generally being rough above and also on the underside of the midrib; the upper leaves clasp the stalk, while the lower, and larger, leaves are set on short hairy stems. In color, a rather dull green. They are numerous all the way from foot to tip.

The many flower-heads, are small, with 14 to 20 delicate, short, pale-lavender rays; the cups are smooth and shining, and are set on leafy foot-stems, in large loose clusters.

Coming just as its purple and white sisters are departing, and as though desiring to atone for their cessation, this delightful late Aster fills the country roads and lanes with the generous abundance of its misty gray-lavender bloom.

BRANCHING ASTER : A. cordifolius.

LOBELIA FAMILY.

LOBELIACEÆ.

Spiked Lobelia. *Lobelia spicata.*

Found in pastures and waysides during July and August.

The single, very erect stalk varies from 1 to 2 feet in height, and is very slender, grooved, and noticeably twisted; its fibre is fine, and near the foot it is hairy to the touch. In color green, with a trace of red at the leaf.

The foot-leaves are large, and a wide oval in shape, and set on margined stems; the upper leaves are a long narrow, oval shape, diminishing in size to a mere line, and are set immediately upon the stalk; the margins are irregularly notched, they are downy to the touch, and light green, tending to yellow. Their arrangement is alternate.

The small flower is 2-lipped, the lower lip being 3-parted with a pair of swellings at the throat of the tube, the upper lip divided by a cleft down the length of the tube; all parts of the corolla are sharp-pointed, and flaring from the 5-parted calyx; the texture is fine and smooth, and the color a pure pale lavender, faintly lined with dark, white near the throat, and pinkish in the tube, the green calyx being also tinted with pink. The flowers, on short foot-stems, are set alternately, and close, in a long, very pretty spike.

There is something individual about the alert carriage of this plant, its whole gesture is erect and animated. It grows numerously in pastures, though in less close fellowship than its little brook sister.

SPIKED LOBELIA : Lobelia spicata.

Lobelia Family.

Brook Lobelia. *Lobelia Kalmii.*

Found on moist ground in limestone soil, blossoming in July and August.

The erect, minutely angular stem, is slender, smooth and polished, fine and at the same time strong in fibre; in color a light grass-green.

The small, narrow and grass-like leaf is about an inch long; towards the root it broadens a little at the tip; color grass-green. The growth is alternate.

The corolla of the small, irregular flower is in 2 divisions, the upper one with 2 narrow, upright parts, between which the stamens show; the lower one with 3 broad equal lobes; the color varies from deep lavender to light, and from a bluish to a pinkish tone, the lower division is marked with a broad white wedge-shaped spot near the throat. The small calyx has 5 thread-like divisions, green, tinged with lavender. From 3 to 4 flowers blossom at once on the top of the stem.

This little Lobelia flourishes especially in the limestone regions of the Green Mountains. It grows in communities among the short grass, beside some wayside spring or rumlet; the flowers, all facing in the same direction, appear as though turned to greet the wayfarer. It is a plant of delicate finish and color, with a lithe and graceful gesture.

BROOK LOBELIA : L. Kalmii.

Indian Tobacco. *Lobelia inflata.*

Found in damp places, and along roadside ditches, in August.

The leafy, sometimes branching stalk grows from 12 to 18 inches, and is not large, though less slender than the Spiked Lobelia, its texture being also coarser; it is very slightly rough to the touch, and light green in color.

The leaves near the foot are about an inch long, and a blunt oval shape; near the top they become smaller and narrower; with coarsely toothed margins, a thin texture, and dull green color. They clasp the stalk alternately.

The flowers are smaller than the other Lobelias mentioned; the corolla is lilac, with a white spot on the lower lip; the calyx, whose 5 divisions are thread-like, is purplish-green. The flowers, on their little foot-stems, are placed in a scattering fashion upon the stalk to form a long terminal spike; each flower is supported by a little leaf or bract.

As the blossoms fall the seed-pods swell into a round and inflated shape, which, together with the scantiness of its bloom, gives the spike an untidy look, unusual in this class of delicate forms and elegant proportions.

INDIAN TOBACCO : L. inflata.

Cardinal Flower. *Lobelia cardinalis.*

Found on the margins of small streams, in light shade, and in low moist ground, from July to October.

The single, rather large stalk is round, and somewhat irregularly grooved, smooth to the touch, and a full green color. It grows from 2 to 4 feet high.

The leaves are generally from 2 to 3 inches in length, tapering at both ends with the veins distinctly showing, and irregularly toothed margins; their texture is fine, and the color a full dark green. They are set immediately upon the stalk, in an alternate arrangement.

The irregular corolla is somewhat 2-lipped, with a long slender tube which is split down its upper side; the lower lip is broad and 3-cleft, the upper being narrow and in 2 parts; its color is a deep and glowing red, with a darker spot near the throat upon the lower lip. The pistil and 5 stamens, which curve outwards noticeably, are of a lighter red color with fine gray tips; the calyx is 5-parted and green. The flowers are arranged in a long, usually one-sided, spike.

Coming into bloom when the midsummer vegetation is growing dusty, this plant fills the eye with the richness of its dark green leafage toned into perfect accord with the glowing hue of its flowers,—their color a truly royal one, of unusual depth as well as brilliancy. The Cardinal Flower should not be plucked ruthlessly, lest it be exterminated, an ever-present danger to the beautiful annuals man appreciates. It can be cultivated from the seed with considerable success.

CARDINAL FLOWER : L. cardinalis.

CAMPANULA FAMILY.

CAMPANULACEÆ.

Venus' Looking-glass. *Specularia perfoliata.*

Found in blossom from June through July, among the grass, in open fields, and on hills.

The simple stalk grows from 12 to 20 inches high; it is somewhat angled, and roughened on the angles; rather weak in fibre it leans against the surrounding vegetation. It is of a light green color.

The small, shell-shaped leaf is broad, heart-shaped at the base, with a scalloped margin. The leaves are strung on the stalk, alternately, at short distances; they are stiffish in texture, and light green in color.

The deeply divided 5-pointed corolla is a deep reddish-violet; there are 5 stamens, and the pistil is 3-parted; the long, cylindrical, green calyx has 5 slender points. The flowers grow from the angles of the leaves, there being usually a number open at once toward the top of the stalk.

The lower flower buds do not open, ripening their seeds without the show of blossoming. As the flowering season advances the stalk lengthens out into a long wand, strung with shell-like little green leaves, each one holding in its hollow a seed-case.

VENUS' LOOKING-GLASS : Specularia perfoliata.

Harebell. . *Campanula rotundifolia.*

Found during July and August in rocky soil, along roadside thickets; in damp shade, or on exposed and barren uplands.

The stems of this lovely plant are very slender, like leafy wands, from 10 to 16 inches in height; they are firm and fine in fibre, smooth and shining, and bronzy-green.

The grass-like leaf is about an inch long, fine and thin and smooth; its color betrays the violet hues that temper all the green parts of the plant.

The blossom varies in size rather noticeably. Its corolla is shaped like a bell with 5 small pointed tips which curve outward to show the long lavender pistil with its malachite-green tip; the texture of the bell is delicately thin and yet firm, and the color an exquisite violet, which ranges from pale lavender, or even almost white, to a reddish-purple hue. The green calyx is 5-parted, its divisions very slender, half as long as the bell, and clinging closely to its shape. The many blossoms nod on thread-like stems.

In early spring the Harebell plant consists of a tuffet of small, round, slightly notched leaves, on spreading stems; these mostly disappear when the flowering stems begin to rise. In part, the swaying, flexile grace of gesture belonging to these flowers may be due to the light way in which the bells are caught in their tiny calices. When advanced in maturity the pistil becomes 3-parted and loses its vivid green tip. The Harebell is commonly credited with a love of shade, but it is frequently found in the crevices of exposed rock-ledges; and a favorite haunt, in one instance, is a bare mountain ridge, covered only by thick dry gray mosses, where these lovely bells nod amidst the Ebony Fern leaves (*A. ebeneum*), in thrifty vigor under the broad sunlight.

HAREBELL : Campanula rotundifolia.

Campanula Family.

Bellflower. *Campanula rapunculoides.*

Found in July on dry roadsides, and along walls and fences.

The stalk is single and leafy, slender, and slightly rough with hairs, from 2 to 4 feet in height; light green.

The root-leaves are small, and heart-shaped, with scalloped margins, set on stems that are sometimes 6 inches long. The lowest leaves along the stalk are shaped like an Indian arrow-point; the upper leaves are long and narrow; the margins are irregularly toothed, they are thin in texture, hairy, and light green; and are set on short broad stems which clasp the stalk alternately.

The corolla is bell-shaped with 5 outward-curving, tapering tips, and a beautiful violet-blue color; the pistil is 3-parted, protruding, and purple tinted; the green calyx is 5-parted, its divisions abruptly turned back. The flowers are set along one side of the stalk in the angles of the small upper leaves, forming a long wand-like spire.

Although the flowers bloom first at the base of the spire, frequently, when the tip has begun to hang out its noticeable bells, fresh buds will push forth far below, and open beside the old dried blossoms at the foot,—for the withered flower clings long to the calyx.

BELLFLOWER : C. rapunculoides.

HEATH FAMILY.

ERICACEÆ.

Trailing Arbutus. *Epigæa repens.*

May flower.

Ground Laurel.

Found in the woods, or clearings near woods, and upland pastures, during April. It particularly favors pine woods.

The branching leafy stalk is low, and trailing close to the ground under dry leaves and dead grass; it is tough and woody-fibred, and rough-hairy to the touch; rather slender. Its color is rusty brown, and very rich in tone.

The oval leaf is heart-shaped at the base, with a strong midrib which is somewhat taut and gives the entire margin usually an undulating character; the fibre is tough, and rough to the touch. The color is a strong positive green, more or less worm-eaten, and rust-spotted; it is evergreen. The leaves are set, on slender rough stems, alternately, at irregular intervals, and more closely near the flowers. The new leaves come after the blossoming time.

The flower has a tubular corolla, spreading into 5 rounded points; its color varies from an exquisite white to a deeply tinted rose; the inconspicuous stamens show only as a feathery, pale yellow ring in the centre. The 5-parted, pale green calyx is set around with 5 similar leafy bracts. The blossoms, on their little foot-stems, are gathered in close clusters along the ends of the stalk and branches. They exhale a sweet and spicy fragrance.

The plant, with its green and rusty leaves, hugs the earth so closely that often only the tips of the flowery clusters show here and there among the dried leaves, which almost conceal them from their friendly enemies, whose love of their beauty knows no better manner of exhibiting itself than by tearing the vine up by its roots. This selfish ignorance is fast exterminating the lovely flower in the populous districts of New England,—already it has become in certain place as mere tradition. As though in revenge, nature keeps fast the secret of its growth, and the Arbutus refuses to live in man's care for more than one or two seasons.

ARBUTUS: Epigæa repens.

Cassandra. *Cassandra calyculata.*

Leather-leaf.

Found in April and May, in marshes and swamps, sometimes standing in water to the depth of two feet.

This shrub, about 3 or 4 feet high, branches often, and is tough-fibred; the bark when new is smooth, but is inclined to become frayed and to split when it is old. The color is brown, of a golden hue.

The leaf is oval, widest near the tip, the midrib is prominent beneath, the margin is entire and slightly thickened on the edge, the texture is coarse grained and tough, but not thick; while the upper surface is smooth and shining, the underside is dull. It is evergreen; in color green, rusty underneath. The arrangement is alternate, and close together, and the leaves are so set as to point upwards; their short stems are often reddish.

The corolla is a small 5-pointed bell, curved inwards at the throat and spreading its points to show the thread-like, green pistil; of a fine smooth texture and pure white; the 5-parted calyx is curved closely to the bell,—white, or yellow, or tawny-tinted; at its base are found 2 little rusty, or white bracts. The flowers are set on short rusty stems which grow from the angles of the leaves, and turn downward.

It is worth the effort to discover the shy Cassandra's haunts, in order to see the bush, its slender branches set close with pretty hanging bells beneath the alert leaves, that stand upright above them, in watchful military rows.

CASSANDRA : Cassandra calyculata.

Marsh Andromeda. *Andromeda polifolia.*

Wild Rosemary.

Found in swamps and marsh lands, in May.

This shrub grows between 1 and 2 feet high; it is branching, leafy, and slender, with a woody fibre. The bark on the young shoots is smooth and firm, when old it is rough and inclined to split.

The leaf is evergreen. In shape it is long and needle-like, a resemblance caused by its closely rolled edges which give it a stiff erectness of bearing; the texture is firm and dry, its upper surface being slightly grained, though it is smooth underneath. In color it is a dark, rich green, pale beneath. The leaves are set, on very short tawny stems, close together, and alternately.

The mouth of the small bell-shaped flower is almost closed; its oval form is diversified by the little pinched folds which run up from between its 5 little tips. In color it is a rosy tinted white; the little 5-parted calyx being colored like the corolla. The bells are set on short white foot-stems that are enfolded by tiny greenish-pink bracts; they are close gathered in small groups, and nod at the ends of the branches.

The fine-pointed leaves, whatever the angle from which they spring, all turn upward, giving a curious flat and conventionally decorative effect to the branches.

MARSH ANDROMEDA; Andromeda polifolia.

Privet Andromeda. *Andromeda ligustrina.*

Found in moist wayside thickets and swamps; blossoming in June.

The tough, woody stalk, erect, branching, and leafy, is covered with a smooth, light gray bark. It grows from 3 to 6, or more, feet in height.

The small leaves are from 1 to 2 inches long, tapering at both ends; they are alternate, on very short foot-stems. The margin is entire, or very finely notched, surface smooth, and texture firm. Color, green.

The small, bell-shaped flower is nearly round, with 5 tiny, re-curved points at the top. It is inconspicuous in color, being of a dull greenish white, the tawny stamens showing within. The flowers, on short, curved stems, hang from one side of the twigs, on the ends of the branches.

The seed-case is small, round, brown, and 5-parted; it is especially noticeable in winter and early spring, and is at all times more attractive to the eye than the colorless flowers,—it adds a graceful touch to the winter bouquet gathered by the twig-loving wayfarer.

PRIVET ANDROMEDA : A. ligustrina.

Pink Azalea. *Rhododendron nudiflorum.*

Swamp Pink.

Honeysuckle.

Found in swamps, moist woods, and on hillsides in May.

This woody-fibred, branching, and leafy shrub, varies in height from 3 to 6 feet; it has a light, warm-gray bark, nearly smooth to the touch.

The charming leaf is oval in shape, tapering at both ends, with an entire margin; its texture is thin, and the fine surface bears a few soft short scattering hairs. In color it is a light pure golden green. The growth is alternate, and somewhat clustering.

The large flower is, in shape, a long slender tube spreading at the top into 5 long-pointed divisions with a fold in the center of each; the 5 stamens and pistil are all long and slender, extending their curving ends far out from the tube; the calyx is hardly noticeable. The color of the corolla varies from pale to deep rose-pink, the tone deepening toward the base of the tube, while the stamens and pistil are rosy crimson,—the tip of the pistil is pinkish-brown. The flowers grow in groups of 5 or more, on short pale green stems, from the ends of the branches. They are very fragrant.

The very essence of spring seems to dwell in the pink and green colors and the spicy breath of this Azalea. The gesture in dropping its flowers is graceful,—the blossom, sliding down the long pistil, hangs swaying on its tip for some time before it finally drops softly to the earth. The branches, especially the lower ones, swing out from the bush in long free curves.

PINK AZALEA : Rhododendron nudiflorum.

White Azalea. *Rhododendron viscosum.*

Found in swamps and wet lands during July.

This shrub grows from 4 to 6 or even 7 feet high, and branches less regularly than the Pink Azalia, and is somewhat less leafy in habit; it is rather slender, woody-fibred, and the bark is dry and slightly rough. In color, reddish-gray.

The oval leaf is widest near the tip whose extreme point is noticeably sharp; its midrib is marked, and the margin is entire, the edge and underside of the midrib being hairy; the texture is thin and firm, the upper surface glossy. The color of the new growths is a fine green (less golden than its sister) which becomes dark when older. The leaves grow in clustered groups.

The flower is smaller than the earlier Azalea, and its points are more curled; it is pure white in color, the outside of the tube being covered with tiny red hairs which are sticky to the touch. The white stamens, with their straw-colored tips, are shorter than the pistil which is faintly pink-tinted, with a darker tip. The calyx is not observable without close inspection; the green foot-stems are very short; and the flowers are grouped terminally upon the twigs.

There is a reddish tinge to the bud, and the flower is delightfully odorous, and the blooming time is pleasantly prolonged.

WHITE AZALEA: R. viscosum.

Low Blueberry. *Vaccinium vacillans.*

Found in dry uplands, and light woods, in May.

The woody, branching stalk, from 1 to 2 feet high, has a smooth, thin, green bark.

The oval leaves are small, about an inch long, unbroken on the edge, and set opposite each other on scarcely perceptible stems; they are rather few in number, fine in texture, smooth, and of a light green color.

The small, bell-like corolla is slightly contracted at the top, 5-parted, with the small tips rolled back. Color white, more or less tinged and streaked with light red. There are 10 orange-tipped stamens, and 1 pale green pistil; the 5-parted calyx is green, tinged with red. The flowers hang on short stems, drooping in clusters of 5 to 7, or more, from the ends of the twigs.

The flowers appear while the leafage still shows the red flush of the new growth. The green twiggery of this low bush gives an early promise of spring, long before the leaves think of showing themselves. The round, sweet and juicy berries, dark blue with a fine bloom, surrounded by the harmonious green of the leafage, have a decided charm of color too rarely noted by those who seek them for their edible qualities only.

LOW BLUEBERRY : Vaccinium vacillans.

Deerberry. *Vaccinium stamineum.*

Squaw Huckleberry.

Found in June, in dry woods.

A branching, leafy shrub, which grows from 2 to 4 feet high ; its stalk is stout, and woody, and covered with a gray bark.

The oval leaf seems rather small for the size of the bush ; it has an entire margin, a firm texture that is somewhat tough-fibred, and smooth surface. Color, light green, and pale beneath. The leaves are set on very short stems, alternately.

The small bell-shaped corolla spreads into 5 outward curving points ; it is white. The stamens form a close, pointed cluster about the pistil and hang out from the flower bell,—they are dull orange in color ; the small calyx is green. These bells swing on slender stems, from the angles of little leaves, in thick clusters along the lower sides of the branches.

The Deerberry's branches stretch out in a nearly horizontal direction ; its profusion of pretty bells begin to open while still undeveloped, and are about a fortnight in coming to their full beauty, to which a pleasing touch of individuality is given by the orange-tipped stamens. The fruit is flat to the taste, and gives the bush its second folk-name.

DEERBERRY : V. stamineum.

Mountain Laurel. *Kalmia latifolia.*

Found in rocky pastures, uplands and light woods, and swampy grounds, in June.

This is a large shrub varying in height from 4 to 8 feet, and occasionally taller. Its stalk and branches are more or less twisted and angular in growth, and woody, of a fibre compact and tough; the old growths are covered with a roughened gray bark.

The beautiful leaf is evergreen; of an oval shape, with a tapering tip, an entire margin, strong midrib, a firm fine texture, and a smooth surface. The color is a fine dark green in the old growths, a light vigorous green when new. The leaves, on very short stems, are usually placed alternately, but are sometimes opposite each other, and toward the end of the branches are clustered.

The corolla is bowl-shaped, with 5 or 6 points; around the middle of this bowl are 10 little pockets,—each one of which holds the tip of a stamen until it is ready to spring out and scatter its pollen,—these pockets, or sacs, projecting on the outside of the bowl, form little spurs all around it. The color of the flower is white, or pink; in the bottom of the bowl a 10-pointed star is outlined in dark crimson, and flecks of crimson occur just above the little pockets. The tiny seed-box in the center is green; the elastic stamens are silky white; the little calyx is green; the flower-stems pale and sticky. The flowers form large and conspicuous clusters on the ends of the branches.

The flowers and buds have a pretty shell-like quality. Shortly after flowering, the vigorous light green shoots put forth, and the ripening seed-boxes take on a crimson hue, making the Laurel pasture all aglow a second time with rich color. This 5-angled seed-box, turned to brown, remains throughout the winter in pleasing contrast to the fine evergreen leafage.

MOUNTAIN LAUREL: Kalmia latifolia.

Pale Laurel. *Kalmia glauca.*

Found in cold bogs and swamps, during June.

This shrub is between 1 and 2 feet in height; it is woody-fibred, hard and firm, with a thin, close bark. The branches are curious in growth, being formed of short sections that are two-edged and somewhat flat: these sections are placed alternately and at right angles to each other. The color is a dark rich brown.

The leaf is oblong, with a blunt tip, and a noticeably rolled-under edge; the surface is glossy above, and the texture is tough. It is evergreen, dark above and whitey-green underneath, the midrib being yellowish. The leaves grow in pairs, upon very short stems that spring from the section-joints, at right angles to each other.

The flower is small, similar to the Mountain Laurel; of a clear light crimson color, with dark-tipped stamens. The blossoms are set on dull crimson-red stems, and arranged in terminal groups.

This is rather rare, and not easy to become acquainted with owing to its preference for swamp holes. The tiny seed-pods on their thread stems are very pretty.

PALE LAUREL: K. glauca.

Sheep's Laurel. *Kalmia angustifolia.*

Found on upland slopes and hilly pastures, in June.

This branching, very leafy, bush is 18 inches to 2 or 3 feet in height, with a woody fibre, and tough bark. The new shoots are green, the older growths turning to reddish-brown.

The leaf is a long oval, with a rolled-under edge; not large, but otherwise like that of the Mountain Laurel. It is evergreen, the old growths dark and dull, with rusty spots of weather-wear; the fresh leaves are bright green, the midrib being yellow, with a hint of pink underneath. The leaves are set on short stems, and placed in little groups near together.

The blossom is smaller and more shallow than the Mountain Laurel; it is in color a strong dark pink, with the star design outlined in dark crimson. The 10 stamens are shining, and pale pink, with crimson tips; the curved pistil is light pink. The flowers, on tiny foot-stems, are arranged in loose clusters, of a dozen or more, upon a short stem; these clusters are placed in a whorl about the stalk, at the summit of last year's growth, and beneath the over-topping new shoot.

The old leaves bend downward, while the new stretch themselves upward, holding their tips nearly erect.

SHEEP'S LAUREL : K. angustifolia.

Shinleaf. *Pyrola elliptica.*

Found in the woods in June.

The little underground stalk throws up a few leaves, and a flower stem which reaches 6 or 8 inches in height.

The leaf is round, or oval, showing the midrib and veins, with an entire margin whose edge curls under, and a tough leathery fibre. It is evergreen, dark and strong in color, the ribs and veins being whitish. It is set on a short, margined, reddish stem, which is protected at the ground by an enfolding dark sheath.

The 5 petals of the flower form a cup; they are thin and waxen in texture, and are pale greenish-white; the 10 yellow-tipped white stamens huddle all together in the upper part of the cup; the long curved pistil is down-bent; the calyx is 5-parted, flat, and green. Several flowers on short, down-turned, green-reddish stems, are placed together upon a slender, erect, green stem which rises from the ground; it is tinted reddish at its base, and midway its length bears one small red-green bract.

There is a smack of individuality about this plant; it presents an appearance of being self-sufficing, and exclusive, though growing in more or less numerous companionship with its kindred.

SHINLEAF : Pyrola elliptica.

Small Pyrola. *Pyrola secunda.*

Found in woodlands during June and July.

The 3- to 6-inch-long flower-stem springs, along with several leaves, from the top of an underground, somewhat square, stalk.

The leaf is oval, with a somewhat pointed tip, a midrib that is strong and prominent above as well as beneath, and a finely scalloped margin; its texture is thin and firm, and its surface glossy; it is evergreen. Set on slender trough-like short stems, the leaves form a small group. In color a fine, clear green.

The flower is small; the 5 obtuse-pointed, greenish-white petals curve in the shape of a bell, the slightly curving, green pistil protruding; the 5-parted calyx is very small and greenish. The flowers, on their little foot-stems, are set along the stem in a nodding row, whose weight, apparently, pulls the erect stem to one side. A few tiny leaf-kins occur on this stem.

When the flowers fall, the little 5-scalloped seed-pods with the long pistils remain long in their places. The buds do not open in regular sequence, as is usual among blossoms similarly arranged.

SMALL PYROLA : P. secunda.

One-flowered Pyrola. *Moneses grandiflora.*

Found usually in pine woods, by shaded brooks, in June.

The small, round, and pale stalk runs along the earth just under its surface, and terminates in a rosette of a few leaves, loosely lying upon the ground, and a flower stem from 2 to 4 inches high.

The round leaf is very smooth underneath, while the ribs and veins are prominent above; the margin is finely notched, and the texture is thin. In color a rich, cool green.

The 5-pointed petals of the flower are a shallow shell-shape; their margins curl under somewhat, their texture is thin and waxen, and their surface is smooth to the touch; color, white, inclined to ivory. The 10 white stamens have curious 2-horned, dull-yellow tips,—they lie back, with a quick curve, in the hollows of the petals; the bright green pistil bends, or curves downward; the flat 5-parted calyx is very small. The single flower is set on the crook-like tip of the pale-green flower-stem, which bears one or two tiny pale bracts.

This boldly curved crook of the flower-stem is completely straightened when the petals fall,—the seed-box is held upright. Like most of its tribe this is a gregarious little plant, and grows in plantations.

ONE-FLOWERED PYROLA : Moneses grandiflora.

Prince's Pine. *Chimaphila umbellata.*

Pipsissewa.

Found in dry woods during July.

The simple leafy stalk varies from 4 to 10 inches in height, and is round, tough-fibred, and woody at the base. Color, green.

The oblong leaf is widest toward the tip, and tapering toward the base; the margin is notched, the texture is fine, firm, and thick, with a smooth and shining surface. The color is dark green, lighter beneath; it is evergreen. The leaves, on very short stems, grow in whorls of 5 (generally speaking), about the stalk.

The flower has 5 rounded, concave, white petals, with a rose colored ring marked in its center: the 10 pinkish stamens are set around the large, conical, green pistil, whose summit is flat and sticky; the small 5-parted calyx is green. Several flowers, on short curving stems, grow in a cluster, from the top of the flower-stem.

Pipsissewa's seed-cases are interesting; they are round and brown, and, borne upright on the end of the slender stems, are truly decorative in aspect, and with the shining green leaves remain unchanged by winter's cold. In Maine the plant is called "Love-in-winter."

PRINCE'S PINE : Chimaphila umbellata.

Spotted Wintergreen. *Chimaphila maculata.*

Found in dry woods, commonly under evergreen trees, in July.

The dull red, tough stem, 5 or 6 inches in height, bears one or two whorls of leaves.

The leaves, about 2 inches long, are tapering at the tip, with a few small notches on the margin; they are thick, and leathery, with a smooth surface, and are set in whorls of 4 or 5 on short foot-stems. In color, dark green, with the ribs marked out by broad lines of light.

In general form, the flower is much like that of the Pipsissewa. The petals are white, the stamens pale cream, and the pistil green.

This form of the Pipsissewa is less common in the New England than in the Middle States. Its variegated leaves are a pleasing, somewhat rare note in our winter leafage.

SPOTTED WINTERGREEN : C. maculata.

Wintergreen. *Gaultheria procumbens.*

Found during July in woods, and along the edges of woods.

The creeping stalk sends up an erect stem, leafy at the top, about 4 or 5 inches high, woody-fibred and tough, and smooth to the touch. Its color is green,—red toward the root.

The leaf is a broad oval, with a rounded tip, an obscurely notched margin, of a tough and thick fibre, and smooth, polished surface. It is evergreen: when old a dark green, often bronzy; more yellow-green, tinged with dull red, when young. The alternate leaves, on very short stems, are clustered at the top of the stalk.

The small bell-shaped flower is minutely 5-parted, and all white. The flowers, on short curving stems, grow singly from the angles of the leaves, hanging their bells downward.

The fruit is round and small, a bright cherry red in color; it ripens in the fall and remains throughout snow-time, always ready to lend its glowing color, with the bronzy leaves that surround it, to a winter bouquet from the woods. The new shoots put forth from the ground in June, and are called "youngsters" in the country; they have an aromatic, pungent flavor, and going "youngstering" is a favorite diversion of childhood. The plant is a great colonist, and year after year its plantations thrive in the same localities.

WINTERGREEN : Gaultheria procumbens.

False Beech Drops. *Monotropa Hypopitys.*

Pine Sap.

Found growing upon the roots of pine or oak trees, from June to September.

The single and erect stalk is about 6 or 8 inches high; thick, fleshy, and smooth, or downy. It is pale at the foot, deepening to a crimson-red near the flowers.

The small and sheath-like bracts are indeterminate in shape, thin and dry. In color yellow-red, turning blackish when withered. A few only occur upon the stalk.

The small flowers are irregularly vase-shaped, and composed of 8 or 10 narrow fleshy parts with crinkled tips; they are set on short stems, in the clasp of a bract, and arranged in terminal groups of 2 to 5 in number. The color is rosy-red, with yellow tips,—flowers, bracts, and the top of the stalk following the same scheme of color.

A parasite, growing upon the roots, and, though not unpleasing in general aspect when perfectly fresh, betraying the base quality of its nature when mature, for an unwholesome mould spreads over its parts as it grows old. When first opened the flowers turn down, but become erect with age.

FALSE BEECH DROPS : Monotropa Hypopitys.

Indian Pipe. *Monotropa uniflora.*

Corpse Plant.

Found in dark, damp woods, from June to August.

The thick, round, flower-stem varies from 3 to 8 inches in height, and is fleshy, smooth, and clammy. Its color is white, or faintly flesh-tinted.

The small, scaly bracts, which serve for leaves, are white.

The large bell-shaped flower is formed of 5 long, narrow, fleshy white parts, whose tips flare a little. The 10 stamens are dull tawny. The flowers are nodding, usually solitary, though sometimes 2 or even 3 are grouped on one stem.

A parasitic growth on roots and decaying vegetable matter, speedily turning black when gathered, the Indian Pipe displays none of the pleasing attributes commonly associated with healthful sun-loving vegetation. It is, by nature, designed for the semi-twilight of the dark forest, and illy bears transportation into the brighter light of the open; even in the shadows of the woods, it is often found covered by dead leaves.

INDIAN PIPE : M. unitlora.

PRIMROSE FAMILY.

PRIMULACEÆ.

Star-flower. *Trientalis Americana.*
Star Anemone.
Star-of-Bethlehem.
Chickweed Wintergreen.

Found in moist shade during May.

This very slender and smooth little stalk grows from 3 to 5 inches in height, bears one or two sheath-like leaves near the root, and terminates in a whorl of leaves at the top. It is green, slightly reddish at the foot.

The long leaf is sharp-pointed at both ends, with an entire margin, a thin and delicate texture which shows plainly the pattern-like tracery of the ribs and veins, and a shining surface; the color is a full green. 6, or more, leaves, of unequal size, spread in a whorl upon the summit of the stalk.

The flower has 7 nearly diamond-shaped parts, of a thin texture, and pure white color; they spread flat, their edges just overlapping in a 7-pointed star, the 7 long, and narrow, greenish divisions of the calyx alternating with them; the 10 thread-like stamens are white, with orange tips. A single flower, borne on a slender stem, rises from the whorl of leaves.

The number of the corolla-divisions sometimes varies, but 7 is the usual measure. It is noticeable that the flower-stem is set a trifle underneath the lap of the leaves, causing an inclination of the star to one side. A tiny leaf is found sitting on the stalk just under the leafy canopy.

STAR FLOWER: Trientalis Americana.

Loosestrife. *Lysimachia quadrifolia.*

Found in moist grounds, and woods, in June and July.

The single stalk, from 12 to 18 inches in height, is hairy and faintly ridgy, and light green in color.

The leaf is oval and pointed at both ends; from 2 to 3 inches long, with a strong midrib; the upper surface smooth to the touch, the lower hairy, and the color yellow-green. The leaves are set close on the stalk in whorls of fours and fives, with a single pair occurring near the foot of the stalk.

The divisions of the flower are 5, long-pointed, fine in texture, and light yellow, with a few tiny red streaks, and a bright red marking at their base; the 5 erect, pale yellow stamens, tipped with tawny, are united at the foot in a collar; the calyx-parts are 5, narrow, pointed, and light green. The flowers, set on thread-like stems spring from the angles of the leaves,—a flower for each leaf.

As many as six or seven whorls of leaves, four often accompanied by flowers, are found on a single stalk.

LOOSESTRIFE : Lysimachia quadrifolia.

Spike Loosestrife. *Lysimachia stricta.*

Found in moist lands and fields, in July.

The stalk, from 12 to 18 inches in height, is branching near the top, leafy, and smooth, but grooved beneath the branches; it is hollow, and has a stiff fibre; pale yellow-green.

The long and narrow oval leaf is sometimes 2 and 3 inches long and only ½ an inch in width; its texture is thin, its surface very smooth, and the margin entire. The color is a light yellow-green. The leaves clasp the stalk in pairs, which occur at right angles to each other, and are near together.

The flowers are about half an inch across, otherwise in color and shape exactly resembling *L. quadrifolia;* they are set on inch long stems, and arranged in irregular rings about the stalk, forming a noticeable feathery spike, 5 or 6 inches in length.

The blossoms open first at the bottom of the spike, several rings flowering at one time. The branches occur in pairs, symmetrically.

SPIKE LOOSESTRIFE : L. stricta.

——— *Steironema ciliatum.*

Found in low places, and among shrubby growths, in July.

The single, smooth, 4-angled stalk is from 2 to 3 feet in height, and a shining, light green color, sometimes bronzy.

The leaf is long oval, blunt or very slightly heart-shaped at the base, tapering to a long and very sharp tip; the margin is entire, the ribs noticeable, and the upper surface is velvety to the touch; the color light green. The leaves are set on short stems, which are fringed with erect hairs along their upper edges, and arranged in pairs, the pairs being at right angles to each other.

The rather large corolla has 5 divisions of a rounded oval shape with an abrupt little tip; their outer margin is somewhat puckered, the texture thin, and the color a pure light yellow,—about their bases is a reddish marking that makes a ring in the center of the flower; the 5 erect stamens are straw-color, and the long pistil is green; the calyx is 5-parted, and full green in color. The flowers, on slender foot-stems, are placed by twos and fours on leafy stems, that spring terminally, and from the angles of the leaves.

This handsome plant takes kindly to garden cultivation.

—— Steironema ciliatum.

Common Pimpernel. *Anagallis arvensis.*

Poor Man's Weather Glass.

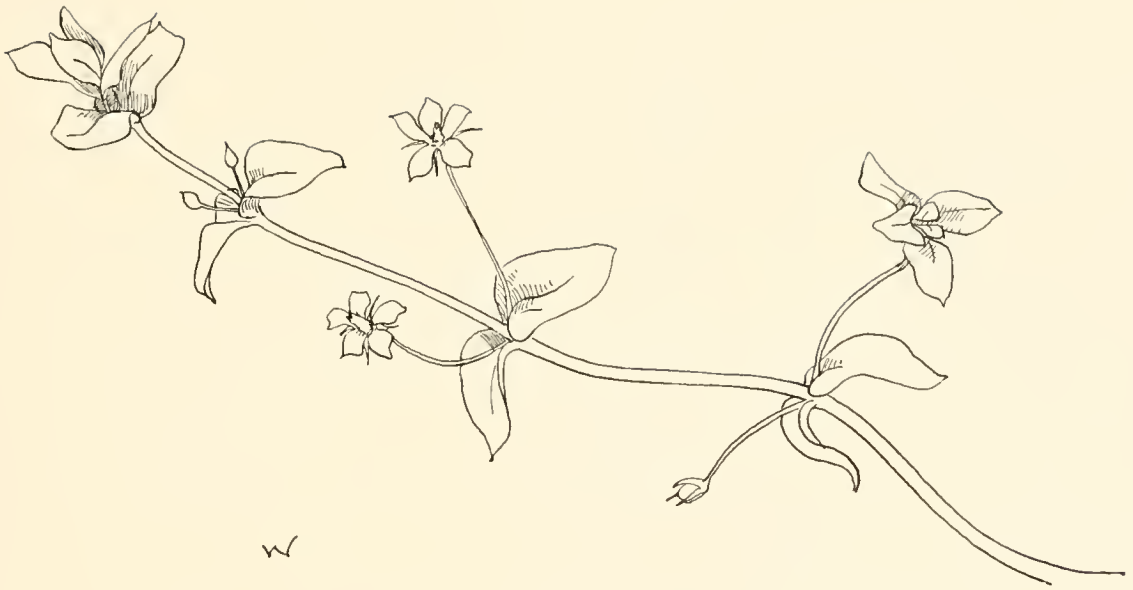
Found in waste places and sandy soil, from June to September.

The several stems of this spreading plant lie upon the ground in a close mat; they are square, the sides being twisted; smooth, shining, and light green. They are commonly about 6 inches in length, but vary somewhat.

The small oval leaf is widest at the base, entire, weak and loose in texture, and dull green, the under side speckled with faint purple dots. The leaves occur in pairs at regular intervals.

The pretty little flower is very variable in color; its 5-parted and round-pointed corolla is purple, blue or white sometimes, but most commonly is orange-red with a violet ring in the center, while the collar which unites the 5 white stamens (they have yellow tips) is red-violet —a curious color combination. The calyx is 5-parted, shallow, and green. The flowers, on thread-like stems, occur in pairs, springing from the angles of the leaves along the stalk.

The lowest buds open first; the blossoms last but a day,—they do not often spread in overcast weather, nor open until the sun is shining full, and they close by four o'clock in the afternoon. This habit causes the folk-name, which is more surely applicable to the plant when it grows by the sea, for though it is found inland in a flourishing condition, it is never acclimated thoroughly enough to adjust its reckoning with the weather, and is continually making false forecasts in its calculations.



COMMON PIMPERNEL : Anagallis arvensis.

DOGBANE FAMILY.

APOCYNACEÆ.

Spreading Dogbane. *Apocynum androsæmifolium.*

Found along the borders of wayside thickets in June and July.

The branching, woody-fibred stalk grows from 2 to 3 feet in height; it has a sticky, milky juice, and is smooth; dull-red on the upper side, greenish on the under.

The entire, smooth leaves are slightly pointed at the ends; dull green; they are set on extremely short stems in pairs.

The small bell-shaped flowers have 5 recurved points, and are white, striped on the inside with hair lines of pink; their 5 yellowish stamens are arranged in a short, pointed cone. They hang on short stems, in small clusters from the ends of the branches and the angles of the leaves.

Taken by itself the Dogbane's flower is pretty, but the plant is sprangly in growth and awkward in gesture; its branches spread at an unpleasing angle, and the leaves are stiffly set. It is seen at its best among tall grasses, where only the pink bells of the flowering tips arise above the neigboring growths. The plant is much visited by a small iridescent green beetle.

SPREADING DOGBANE : Apocynum androsæmifolium.

Indian Hemp. *Apocynum cannabinum.*

Found on river banks during July and August.

This branching plant, from 2 to 3 feet in height, has milky juice, smooth and exceedingly tough bark, and is dull red in color.

The tip of the oval leaf is abruptly sharp-pointed; the margin is entire, the surface is smooth, and the color is dark green. The leaves are set on short stems, and placed in pairs.

The small and inconspicuous flowers are 5-pointed, and greenish white. They form small flat clusters on the ends of the branches.

The leaves and flowers have a faint pleasant odor. The plant is extremely awkward in gesture, without the redeeming grace of bloom belonging to its next of kin, the Dogbane.

INDIAN HEMP: A. cannabinum.

MILKWEED FAMILY.

ASCLEPIADACEÆ.

Four-leaved Milkweed. *Asclepias quadrifolia.*

Found during June and July, in shady places, on dry uplands.

The stalk is leafy and slender, round, and tough fibred, and 1 or 2 feet high; it is downy with soft hairs; in color light green, with an indication of pink at the joints.

The oval leaf has a broad base and a sharp-tapering point; the margin is entire or slightly scalloped and wavy or ruffled, the ribs are prominent and hairy underneath, the texture is thin, and the surface is downy above; light green, with a whitey bloom,—pale underneath. The leaves, on slender short stems, are arranged in pairs, or in whorls of 4 of which 2 are smaller than the others; they occur at a considerable distance apart.

The flower is small and delicate in form and texture; its crown, of 5 tubes and 5 little horns, is tinted pale lilac, the 5 lobes are small, down-bent, and creamy pink; the calyx is light green; the foot-stem is long, and pale lilac color. The flowers are gathered in small globe-shaped clusters, set upon terminal pink stems.

Only a few flower-clusters occur on the plant, and the 4-leaved whorls are found midway the height of the stalk. The details of the whole plant are delicately perfected, and the quality of its leafage is pleasing.

FOUR-LEAVED MILKWEED: Asclepias quadrifolia.

Sand Milkweed. *Asclepias obtusifolia.*

Found on sandy barrens and fields in July.

The stalk, which grows from 2 to 3 feet in height, is very leafy in its middle part, and is round, or sometimes a little flattened beneath the leaves; its fibre is strong, and surface smooth. Color, pale green, frequently toned with bronze, or brown.

The leaf is long, square-pointed with a sharp little tip, and heart-shaped at its partly clasping base; its margin is entire, the blade being much ruffled by the tautness of the strong midrib, and its edge is slightly thickened; the texture is thick and tough, and the surface is smooth and soft to the touch; the color is a strong full green, showing purplish at the edge and ribs, and pale silvery underneath where the midrib is white. The leaves occur in pairs which grow at right angles to each other.

The crown tubes are short, broad, and slightly toothed, with noticeable sharp little horns; the lobes are long, pointed, and curving. All these parts are pale greenish-purple, while the small calyx is green. The foot-stems are rather long and slender, and the flower-cluster is large, loose, and terminal.

At about a third of the height of the stalk the leaves begin to crowd together,—sometimes as many as five or six pairs will occur with barely an inch of space between them; they overlap their bases about the stalk, and describe fine curves with their wavy blades. Occasionally a second cluster of flowers is borne at the base of the stem which supports the usual cluster. The juice is very little milky.

SAND MILKWEED: A. obtusifolia.

Swamp Milkweed. *Asclepias incarnata var. pulchra.*

Found in damp hollows and swamps, in July.

The leafy stalk is commonly 2 or 3 feet high, woody-fibred and hollow, with slight ridges on its surface, and downy to the touch. Green in color, modified by pale crimson.

The large leaf (7 inches long sometimes) is sharp-pointed at the tip and slightly heart-shaped at the base; the ribs are prominent underneath, and the margin is entire, the edge being thickened; the texture is thick, the surface downy and hairy underneath; in color a strong yellow-green. The leaves are set on short, stout stems, which partly clasp the stalk, and grow in pairs, that occur at right angles to each other.

The flower is small; the crown is reared high upon its little neck, the horns very slender and pointed, the lobes narrow and curving; the texture of the corolla is fine, and its color is a rich crimson, toned to violet, the calyx parts are half as long as the lobes, and are pale green with a crimson tint. The flowers are set on short, small foot-stems, which are downy, and crimson toned; they form rather large loose clusters, on stout green stems, and grow in a terminal group, or singly from the angles of the upper leaves.

The buds are oval in shape, and of a noticeably richer hue than belongs to the opened flower; they form flat-topped clusters before they reach maturity.

This variety varies from the typical *incarnata* chiefly in being more downy, and shorter of leaf-stem.

SWAMP MILKWEED: A. incarnata, var. pulchra.

Purple Milkweed. *Asclepias purpurascens.*

Found along dry roadsides in July.

The generally single stalk varies from 1 to 3 feet in height, is tough-fibred, slightly grooved, and a trifle downy to the touch; it is very milky. The color is light green, crimson at the joints.

The long, oval leaf is sharp-pointed at the tip and blunt at the base; its midrib is very flat on the top but round beneath, and the cross-veins show plainly; the margin is entire, the edge curling under, and the upper surface is smooth while the underside is velvety; the color is yellow-green, with a crimson midrib that is purple underneath. The leaves, on short, thick purple stems, are placed in pairs, at alternate angles with one another.

The tubes belonging to the crown of this rather large flower are long and oval in shape, their horns being short and broad with suddenly-straight tips; the lobes are long, oval, and widely flaring; all these parts are colored a strong, dark glowing crimson. The flowers are set on foot-stems that are twice their own length, and pale green in color; they are arranged in a loose cluster upon a short, stout purplish stem, and grow terminally, and from the angles of the upper leaves.

This plant is inappropriately designated *purpurascens*, since its full and beautiful crimson flowers are unusually pure in tone.

PURPLE MILKWEED : A. purpurascens.

Poke Milkweed. *Asclepias phytolaccoides.*

Found in moist and shady banks in July.

The leafy stalk is not hollow, but very milky, of a close, firm fibre; it is smooth or slightly downy—especially when young; from 2 to 5 feet in height; clear green.

The large lower leaves (5 or 6 inches long by 3 inches in width) are oval, pointed at both ends; the upper are narrower; their margins are entire, midribs strong, and texture very thin and fine, downy and pleasant to the touch. In color a clear green, paler beneath, the midrib being pinkish above. They are set on short stems, in pairs, which grow at alternate angles.

The flower is large; its oval lobes are very much reversed, and colored a clear light green; the crown tubes are broad, short, and notched at their tips; the horns are long and needle-pointed, they curve, and meet together in the center; these parts are all ivory white, while the little calyx is green. The flowers nod and droop on long, slender, pale foot-stems that hang in a loose cluster on a stout thick stem, which springs from the angle of a side leaf.

Sometimes the plant bears more than one of these flower-clusters; it is the most delicate of our common Milkweeds, exceeding even the Four-leaved in fineness, and the ivory white of its flower crown is remarkable for its clarity of hue.

POKE MILKWEED : A. phytolaccoides.

Butterfly Weed. *Asclepias tuberosa.*

Orange Milkweed.

Pleurisy Root.

Found in dry pastures and fields in July.

The stalk branches often for the flowers; it is leafy, and grows from 2 to 3 feet high, with a strong fibre, its surface is hairy and its color is a strong green, purplish near the foot, and red-orange below the flower-clusters. The juice is not milky.

The long narrow leaf is somewhat blunt-pointed at the tip and heart-shaped at the base, with an entire margin, and a strong midrib; its fibre is strong and coarse, the veins showing, and it is hairy underneath and downy above; the color is a full green, much toned with orange. The leaves are set on short stems, and placed near together, alternately, and with an upward inclination.

The flower is small and long; the crown is set up high on its slender neck, its hoods short and narrow, and yet somewhat longer than the fine-pointed straight horns,—in color a splendid glowing orange; the narrow, fine-pointed lobes are slightly curling, and bright yellow; the calyx is unobservable. The flowers are set on slender, rather long, light green foot-stems, forming a loose flat-topped cluster; the clusters being arranged in a leafy terminal group.

As many as eighteen clusters have been counted upon a single stalk. The color scheme of this plant is especially good; the green betrays the same tawny tone which belongs to the gorgeous flowers.

BUTTERFLY WEED: A. tuberosa.

Common Milkweed. *Asclepias Cornuti.*

Found in meadows and roadsides, from June to August.

The large, round, and tough-fibred stalk, which grows from 3 to 4 feet high, has a sticky and milky juice, is minutely downy, and pale green.

The leaf is often very large (from 4 to 8 inches long), oval, rounded at both ends, with an entire and somewhat wavy margin, and a large midrib: it is thick in texture, smooth above, but a little downy beneath, and grayish-green in color, the underside being silvery,—the wide midrib is light, or often tinged with dull red.

The flower is rather large; the crown is brownish-pink, the lobes light flesh-pink or pale lilac, and the foot-stems are pinkish. The flower-clusters are large, round, and drooping; they spring from the angles of the upper leaves.

Though regarded as a "weed" this Milkweed has many attractive features.

The seed-pods of the Milkweeds are most interesting; rough on the outside, they are beautifully finished within, with a fine, smooth, light lining. The silky plumes of the flat-brown seeds are closely folded together and the seeds lie overlapping like the scales of a fish. The light green outside of the Butterfly-Weed pod, tinged with crimson-tawny, becomes with age a fine tree-trunk gray. In some varieties a likeness to a dove may be found in the inverted pod.

COMMON MILKWEED : A. Cornuti.

GENTIAN FAMILY.

GENTIANACEÆ.

Fringed Gentian. *Gentiana crinita.*

Found in fields, pastures, and along wayside thickets, frequently where it is damp; coming into bloom late in August and continuing until middle October or later.

The stalk, which branches for the flowers, grows usually from 6 inches to 2 feet in height, and is somewhat square near the blossoms, and sometimes twisted; it is grooved, smooth and shining, and light green, tempered with bronze.

The leaf is heart-shaped at the base, tapering sharply to a long-pointed tip, slightly creased on the midrib, with an entire margin, and thin smooth texture. In color it is light green. The leaves clasp the stalk in pairs, which occur at right angles to each other.

The corolla is a deep vase shape spreading at the top into 4 fringed lobes which curve like shells; of a delicate thin texture, and satin smooth surface, in color an evasive azure, impossible to describe, varying from pale to deep (sometimes reddish tinted), and marked upon the outside with fine lines of darker blue. The 4-parted calyx is pinched into 4 angles at its base, and is a light yellow-green color, its long, sharp tips sometimes bronzy. The flowers are set on short, and long, leafy stems; in groups, or singly.

Though often low, and bearing but one flower, it is not uncommon to find a single tall stalk adorned with a dozen or two of blossoms, and a reliable observer reports having found plants 5 feet in stature, and bearing upwards of a hundred flowers and buds apiece! This remarkable luxuriance could only have occurred in some solitary mountain glen unknown to the gentian-hunter, who, between greedy admiration of its beauty and ignorance of its habits, is doing his best to exterminate the plant. The seeds are exceedingly capricious in their choice of a home, and refuse to germinate when garden-sown. For the æsthetic pleasure also it is best not to pluck them; their charm loses its subtlety when carried into civilized environments—the spirit of their loveliness escapes imprisonment.

FRINGED GENTIAN : Gentiana crinita.

Blind Gentian. *Gentiana Andrewsii.*

Closed Gentian.

Found in rich woodlands and pastures, blossoming in September and October.

The single leafy stalk, from 1 foot to 18 inches in height, is round, stout, smooth, and green.

The leaf is large (from 2 to 4 inches long), usually broad oval in shape, tapering to the tip, with an entire margin, and a thick texture; the surface is smooth, and the color a rich green that is frequently weather-worn and rusty. The leaves are set in pairs upon the stalk.

The flower is like a closed bud which never opens, an inflated club-shape from 1 to 1 and ½ inches in length; the corolla is a dark purple-blue color, growing lighter near the base, and in its folds; the 5-parted calyx is more or less green. The flowers are gathered together in a close cluster of four or five, upon the summit of the stalk, amidst the numerous green leaves.

The color of the closed gentian, being low and rich in tone rather than brilliant, loses greatly in value when gathered and fetched into the subdued light of the house.

BLIND GENTIAN: G. Andrewsii.

BORAGE FAMILY.

BORRAGINACEÆ.

Forget-me-not. *Myosotis palustris.*

Mouse-ear.

Found in moist meadows, and by brooks and runnels, flowering in June and July.

The large, somewhat square stalk, from 9 to 20 inches in height, is branching and leafy, rather roughish of surface, with short rootlets starting out on its sides, and light green. It supports itself upon surrounding vegetation.

The leaf, 2 or 3 inches long, is oval with a blunt tip, and partly clasping the stalk; its surface roughened with fine hairs, and it is light green in color.

The small 5-lobed flower is about a quarter of an inch across: its corolla is very fine and even in texture, in color light blue (occasionally pink) with a center of harmonious yellow; the calyx is small, 5-parted, and green. The buds are pinkish. The flowers grow in curving, one-sided, terminal clusters,—sometimes from the angles of the upper leaves.

This is one of the few true blue flowers of our flora; its color is pure and opaque, like that of a turquoise, or a fine enamel, and falls into harmony with the yellow of the center through an exquisite gradation of color. The plant remains in flower a long time, continually forming new buds, and leaving behind the little empty green calyx-cups on its ever-lengthening stem. The blossom of the wild plant is larger than that usually cultivated in the gardens; it is easily propagated by means of cuttings.

FORGET-ME-NOT : Myosotis palustris.

Blue Weed. *Echium vulgare.*

Viper's Bugloss.

Blue Thistle (Vt.).

Found in July, in pastures chiefly, though occasionally straying along country roads.

The stalk, from 3 to 4 or 5 feet in height, is large, and strong; it is branching with short stems which diminish as they near the top; the fibre is coarse, it is roughened with hairs, and its light green color is frequently dotted with rusty-purple freckles.

The lower leaves are very long and narrow, occasionally cut or rudely notched on the edge, while the pointed upper leaves are entire; the texture is coarse, and rough to the touch; the color is green. The arrangement is alternate.

The flower is an irregular vase-shape, spreading into 5 rounding divisions of unequal length, with a very small, green, 5-parted calyx; the corolla is a bright deep blue, the 4 stamens and the pistil are rose-colored. Several flowers are set in a single row along the upper side of a short stem, which is coiled tightly at first, but straightens itself as the rose-colored buds expand. Many of these stems form a large and conspicuous terminal spike; and singly grow from the upper branches.

It is a pity this striking plant should have invaded the farmers' pastures in such bold colonies as to be reckoned by him a pest, and so uprooted, for absolute blue flowers are rare. It deserves especial regard because of its unusual color combination of ultramarine and rose. The "spotted stem made men once think it efficacious for cure of viper's bites, and its seeds, shaped like a viper's head, confirmed the notion."

BLUE WEED : Echium vulgare.

CONVOLVULUS FAMILY.

CONVOLVULACEÆ.

Upright Convolvulus. *Convolvulus spithamæus.*

Found in June, growing on dry and sandy places, in the open.

The stalk is seldom over 10 inches in height, single, leafy, and erect; it is round, and downy with small hairs. Pale green in color, but red near the foot.

The leaf is between 1 and 2 inches in length, oblong, with taper tip, and a narrow heart-shaped base; it is folded slightly on the midrib; all the ribs show plainly, the margin is entire, and the surface is roughened by hairs; in color a full green, somewhat lighter underneath, with a pinkish tint along the edge and the midrib. It is set on a short, downy, reddish stem. The arrangement is alternate.

The flower is large; the corolla a beautiful vase shape with a rolling, slightly 5-angled rim, in texture fine and thin, the outside of the throat shining; within the vase, at the bottom, may be seen 5 deep pits; it is of a pure and exquisite white, toned to creamy-green near the calyx; the 5 stamens are cream colored while the 2-tipped pistil is white. The greenish calyx is 5-parted with small pointed divisions which are almost concealed by the 2 longer, pale green bracts that clasp together closely about its throat. The flower is set on a rather large, flat, downy, pale stem which rises from the angle of a leaf. The plant bears but few flowers.

Far less common than the Bindweed this flower must be reckoned a treasure-trove by its finder. Its texture is so thin that the calyx-color glows within the throat of the vase with a golden green effulgence.

UPRIGHT CONVOLVULUS: Convolvulus spithamæus.

Hedge Bindweed. *Convolvulus sepium.*

Blossoming along the roadside and in the meadow in June and July.

This twining leafy vine, climbing over low shrubbery, has a round, smooth, light green stem.

The broad arrow-shaped leaf is from 2 to 3 inches in length, tapering at the tip, and set on a long floot-stem; the surface is smooth, and the color a grayish-green.

The large funnel-shaped flower is about 2 inches broad and from 2 to 3 inches long; the spreading top is obscurely 5-sided, and singularly fine and delicate in texture, and of a pale shell-pink or white color; the stamens and a 2-divided white pistil are visible within the tube; the 5 pale-green parts of the calyx are nearly enfolded by two larger shell-shaped bracts.

The Bindweed blossoms luxuriantly along the edge of cultivated grounds, and often runs in among the crops to such an extent as to be deemed a pest by the farmer. Though it is the flower of the morning, on cool gray days it frequently remains in bloom late into the afternoon.

HEDGE BINDWEED : C. sepium.

Dodder. *Cuscuta Gronovii.*

Blossoming from August to October in low, damp, and shady ground.

A parasite, climbing high on other plants by winding its smooth, round, bright orange stems closely about their stalks, and growing to them by many sharp little suckers.

There are no leaves, for the vine, stealing its food from honest workers, has no use for them.

The small, broad bell-shaped flower spreads at the top into 5 short divisions; the corolla is of a dull white color, and the inconspicuous calyx greenish-white. The flowers are crowded in thick humps, at short intervals along the twisting stems.

The globular seed-box begins soon to swell within the flower, and develops while the blossoming still goes on. The Dodder starts at first, like an honest plant, from the ground, but as soon as it finds a convenient plant to tap, it breaks its connection with the earth, and wraps itself closely about its victim.

DODDER : Cuscuta Gronovii.

NIGHTSHADE FAMILY.

SOLANACEÆ.

Nightshade. *Solanum Dulcamara.*

Found in flower in June and July in moist grounds.

The stalk, erect at first, branches and takes to climbing later; it is nearly smooth, and quite tough, with a strong, coarse odor; green.

The leaves, from 2 to 3 inches long, are somewhat variable in shape, the lower ones being heart-shaped, while the upper ones are deeply cut at the base into 2 long narrow lobes; they taper at the tip, and are on short foot-stems (about 1 inch long); coarse in texture; dark green.

The 5-pointed star-shaped corolla is of a deep purple color, with a yellow cone, made of 5 stamens, in the center; the calyx is small, bell-shaped and 5-notched; brownish-green. The flowers, on short curving foot-stems, hang in loosely branching clusters from the angles of the leaves.

The oval berry ripening, in August and September, is bright red, while those of the *Deadly* Nightshade are blue-black. Its coarse odor betrays its kinship to the potato plant.

NIGHTSHADE : Solanum Dulcamara.

FIGWORT FAMILY.

SCROPHULARIACEÆ.

Common Lousewort. *Pedicularis Canadensis.*
Beefsteak Plant.

Found on roadside banks, and in dry copses, during May.

Several flower-bearing, leafy, stout stems, 6 to 10 inches high, spring from a foot tuffet of leaves.

The foot-leaves are large and long, and set on long, wide, grooved, hairy stems; the stem leaves taper at each end, and are at first set on short stems, and above clasping; all the leaves are often and regularly cut like a feather, a resemblance increased by the finely toothed margin; with strong midribs, coarse texture, and shining surfaces. The color is dark green, the lower leaves dashed with red-purple, the stems being also red-purple. The leaves occur alternately, and not near together, along the stems.

This curious flower is 2-lipped: the upper is flat and curved, with a two-pronged tip, the lower is 3-lobed, the edges curled inward; their surface shining; the upper lip is a dark purplish-red, the lower, pale yellow, while the throat is reddish. The pistil pushes out between the prongs of the upper lip. The deep and somewhat square calyx is parted beneath the lower lip; it is of a coarse, and hairy aspect, and colored light green, edged with dark red. The flowers, set close, in the hold of little bract-like leaves, are arranged spirally, in a round terminal spike.

As the fresh blossoms climb upward the spike lengthens and becomes club-shaped. The withered flowers cling long after their color has faded; when newly opened, they are all yellow, their beak-like upper lips only faintly flushed with the red, which, presently, assumes so sanguinary a hue that there is some occasion for the waggery of the local folk-name of "Beefsteak Plant."

COMMON LOUSEWORT : Pedicularis Canadensis.

Wood Betony. *Pedicularis lanceolata.*

Lousewort.

Found in swampy places during August and September.

The sometimes branching stalk, from 1 to 2 or 3 feet in height, is round, shining, and generally smooth, or with an occasional roughness. Light green in color.

The long oval leaf is cut into oblong divisions, and the margin is finely toothed, which increases its resemblance to a fern leaf; the strong ribs show plainly, and the color is pale green, inclining to yellow. The leaves, on short stems, are placed in pairs, which point at right angles to each other.

The corolla has a curious one-sided look, because the curving beak-like upper lip closes so tightly down upon the 3-lobed under lip as to push it askew; its color is a pale and somewhat muddy yellow. The 2-parted calyx is deep, and the tips spread; it is green. The flowers are set within the hold of little curved and notched leaves like bracts, in pairs, forming a terminal spike.

Only two or three flowers bloom at one time, and the withered corollas cling long to the calices, which gives an untidy appearance to the plant. The leaf and calyx are decorative in growth.

WOOD BETONY : P. lanceolata.

Indian Paint-brush. *Castilleia coccinea.*

Painted Cup.

Found in June, growing in low grounds, and wet meadows.

The single, leafy stalk rises from a cluster of root-leaves; it is 8 to 10 inches in height, somewhat square-angled, and hollow, of a tough, rather coarse fibre, with a hairy surface. Color, dull crimson, the short hairs being gray or white.

The root-leaves are oblong, seldom notched; on the stalk the lowest leaves are narrow, while above they are wedge-shaped and generally deeply cleft into 3 lobes; the margins are entire, and the surface is hairy. In color a light clear green; the ends of the upper leaves and those which supports the flowers look as though they had been dipped in a scarlet dye. The leaves all sit immediately upon the stalk; they are placed alternately, and at some distance apart, but more crowded among the flowers.

The small corolla of the flower is tubular and 2-lipped, yellow and green in color; it is almost concealed within the long cylindrical 2-cleft calyx, which is colored a clear light green with a scarlet margin. The long curving pistil is green tinted. The flowers are set in the clasp of the upper leaves, and form a close terminal cluster.

Quite eclipsed by the gorgeous hues of the floral leaves and calices, the paler flower hides its head, its long pistil alone claiming attention. The exact marking of the vivid scarlet upon the tips makes the folk-name "Paintbrush" more applicable to its general aspect, than that of "Painted Cup," which of course only applies to the effect of the single calyx. In some localities the color is not scarlet, but yellow, it is reported. The plant is called a parasite by the botanists: it therefore may not be transplanted but glows in splendid patches of color in favorite camps of its own choosing.

INDIAN PAINT-BRUSH : Castilleia coccinea.

Thyme-leaved Speedwell. *Veronica serpyllifolia.*

Paul's Betony.

Found, from May to July, in grassy fields, and along roadsides.

Many branches, varying from 3 to 7 inches in length, spring from the root, and lie on the ground (sometimes rooting so), their tips lifted erect among the grass blades; its growth is slender, leafy, firm of fibre, and smooth. Color green.

The small leaf is oval, with an entire, or slightly irregular, margin, prominent midrib, and smooth surface. In color, a cool green; the leaves, on short stems, are placed in pairs, near together,—at the end of the branch they become crowded.

The corolla is small, and resembles that of the Brooklime; delicate in texture and in color pure white, or streaked with lavender, or blue. The points of the 4-parted green calyx just show between the lobes of the flower. The two stamens are lavender tipped. The flowers, on small foot-stems, spring from the angles of the leaves for a considerable distance along the ends of the branches.

Contrary to the usual habit of the Speedwells these flowers do not fall immediately after they are picked.

THYME-LEAVED SPEEDWELL : Veronica serpyllifolia.

American Brooklime. *Veronica Americana.*

Found by roadside runlets, and meadow brooks, in June and July.

The rather large stalk, sometimes creeps and then lifts itself to the height of 10 or 15 inches; it is hollow, juicy, and fine-fibred, and smooth. Pale green in color.

The long, oval leaf has a grooved midrib and slightly notched margin; it is juicy, and smooth. In color light green. The leaves, on short broad flat stems, that clasp the stalk, are placed in pairs, at right angles to each other.

The little circular corolla is cut into 4 scallops, of which 3 are round-pointed and of equal size, while the fourth is narrower and a trifle longer; the texture is delicate. The color is very pretty, a lavender-blue with slightly darker markings,—the center is white; the 2 stamens are pale purple. The calyx is 4-parted, the divisions narrow and pointed; green. The flowers, set on thread-stems, are placed in little, loose, terminal spires.

A first cousin to the Speedwell of English poetry. These tiny blossoms fall almost as soon as they open their pretty blue eyes, therefore let the observer rest content, without trying to pluck the tender stalks.

AMERICAN BROOKLIME : V. Americana.

Common Speedwell. *Veronica officinalis.*

Upland Speedwell.

Found in dry uplands and light woods in June and July.

The leafy stalk lies along the ground, with the flower-stems rising from it; it is round, downy, and tough. In color green.

The oval leaf, broad and rounded at the tip, tapers at the base into an exceedingly short stem: the edge is notched, and the surface downy. The leaves are set in pairs, and are of a rather light green color.

The small 4-parted flower shows the mark of the Speedwells in the inequality of the divisions, the lower one being much narrower than the other three. There are two stamens, a pistil, and a small green 4-parted calyx. The flowers are closely set on slender spires, rising from the angles of the leaves. Their color is a light lavender, lined with a darker tone.

The flat, heart-shaped pods ripen on the lower part of the spire while the upper part continues to bloom; the flowers speed quickly away,— with a glance, almost, they are gone, so lightly are they held in their green cups.

COMMON SPEEDWELL : V. officinalis.

Mullein. *Verbascum Thapsus.*

High Taper.

Candlewick.

Found on dry, sandy soil, in fields, and among rocks, from June to September.

The single, leafy stalk rises from a foot-tuffet, to the height of 3 or 4 feet, usually, although it varies considerably; it is round, stout, and tough-fibred, covered with wool, which tempers the green and makes it whitey in tone.

The large (from 6 to 12 inches long) foot-leaves have very prominent ribs which show chiefly underneath, entire margins, and are thick, like a blanket with a very woolly surface; the stalk leaves are smaller, and more pointed, and are attached to the stalk for a part of their length,—they are otherwise like the large leaves. In color a whitish green.

The corolla is rather large, somewhat unequally 5-parted with rounded lobes, it is of a fine texture and smooth; in color, a clear pale yellow. The tips of the 5 stamens are orange; the pistil is green, and so is the 5-parted, woolly calyx. The flowers are set closely and numerously in a long, compact, club-shaped, terminal spike.

When the flower-stalk shoots up the foot-tuffet withers, and loses the richer color which, in spring, belongs to its leafage. The rosette forms in the fall,—if potted and wintered in the house, free from the choking dust of the highway, it develops a superfine quality of wool.

MULLEIN : Verbascum Thapsus.

Moth Mullein. *Verbascum Blattaria.*

Found, during July and August, on sand-banks, pastures, and waysides.

The leafy, large, round stalk grows to be 2 or 3 feet high; it is tough-fibred, and the surface is ridgy and smooth; light green.

The large leaf is oblong in shape with an irregularly notched and toothed margin; its stout midrib is flattened above, all the ribs and veins show plainly, the texture being thin and smooth, the upper surface somewhat glossy. The lowest leaves are on short stems, the others are somewhat clasping; they are placed alternately, and near together. The color is a pleasing green.

The corolla is like the common Mullein in shape and texture: in color either yellow, or white, tinted with lavender. The 5 stamens, with curiously shaped, red-orange tips, are fringed with a double row of dull crimson, woolly threads; the pistil, also, is orange-tipped; the calyx is 5-parted, with slender tips. The flowers, on slender stems, are placed alternately, in long, leafy spires. All the calices, little leaves, and foot-stems are covered with fine woolly hairs.

The bud is 5-sided, and the seed-box is a good deal inflated. The peculiar orange of the stamen tips resembles a flowering moss,—their woolly fringe, of course, occasions the name. This elegantly growing plant, with its interesting leaf, is common only in certain localities.

MOTH MULLEIN: V. Blattaria.

Downy False Foxglove. *Gerardia flava.*

Downy Gerardia.

Found in the shade of woods, in July.

The single, leafy stalk, which grows to be 3 or 4 feet high, is square, and hollow; of a stiff, strong fibre, downy with soft hairs. Dull rusty green in color.

The long narrow leaf is broadest at the base, with a tapering tip, the margin is entire or slightly toothed near the base (the edge of the lower leaves being somewhat wavy), the texture is rather thick, and the surface is downy, and like velvet to the touch; the color is yellow-green, slightly pinkish on the midrib. The leaves, on short, downy, purple tinted stems, are set in pairs, at right angles to each other.

The corolla is shaped like an urn, with 5 spreading, rounded lobes, their edges curving or even curling in toward the center; the texture is very fine and thin, showing the veins; the large throat is downy on the inside; sometimes the margin is crinkled; the color is a pure yellow. The 4 yellow stamens are divided into a long and a short pair; the pistil is green. The calyx is 5-parted with a noticeable rounded cleft between the divisions; it is half as long as the corolla, very downy, and green. The flowers, on short stems, are placed in pairs in the angles of the leaves forming a terminal spike.

Since the buds all incline to one side there is literally a back view to the spike. The flowers remain some days in the fullness of bloom, and as many as a dozen may be observed together on a single stalk; long after they have fallen the pistil lingers. The bud is very round at the tip, and exceptionally shining with a gloss that is lost to the opened blossom.

DOWNY FALSE FOXGLOVE : Gerardia flava.

Yellow Gerardia. *Gerardia pedicularia.*

False Foxglove.

Found on the edges of dry woods through August and September.

The stalk (from 2 to 3 feet in height) is branching, and very leafy, round, and soft to the touch, being covered with fine down. Its color is light green.

The leaf is long, much cut into rounded lobes, and bearing a general resemblance to a fern leaf; the texture is fine, and the surface soft, and downy; in color light green. The leaves are placed upon the stalk in pairs.

The tubular large corolla spreads into 5 rounded, slightly irregular lobes, and is a little hairy in the throat; color, a pure clear yellow; the pistil is a thread of green, and the stamens are 4 in number: the green calyx is unequally 5-parted. The flowers, on short curving foot-stems, are usually arranged in pairs, springing from the angles of the upper leaves.

A fragrance, slightly suggestive of Sweet-Fern belongs to the leaves. This plant is noticeable for the fine texture of its parts; the pointed green seed-pod rising from the frill of the calyx has also a decorative value. All the Gerardias bear the stigma of being "clandestine root parasites,"—they do not therefore seem worthy namesakes of the honest, nature-loving old Herbalist, Gerarde, who lived in the days when botanists wrote plain English. According to Gray the suckers of the roots of these plants not only fasten upon other growths, but upon their own, thus preying upon themselves.

YELLOW GERARDIA: G. pedicularia.

Slender Gerardia. *Gerardia tenuifolia.*

Little Gerardia.

Found, during August and September, on dry banks.

The erect, branching, and sparingly leafy stalk grows from 4 to 10 inches high; it is slender, and smooth. Green, tinged with reddish-brown.

The leaves are long and narrow, almost needle-like; in color green. They are set alternately upon the stalk.

The corolla is an irregular bell-shape with 5 rounded lobes, 2 being smaller than the others, and folded over to cover the pistil and stamens; its color is a pale magenta. The 4 stamens are woolly, and yellow-tinted; the calyx is small and 5-toothed, and green. The flowers grow on slender foot-stems along the sides of the stalk and branches.

As the fruit ripens the stems and seed-boxes turn reddish-brown. This is a common flower along roadsides.

SLENDER GERARDIA : G. tenuifolia.

Butter-and-Eggs. *Linaria vulgaris.*
Jacob's Ladder.
Ramsted.

Found from July to September in fields, meadows, and roadsides.

The very leafy, and slightly branching, stalk varies in height from 1 to 2 or 3 feet; it is slender, round, of a firm close fibre, and smooth. Light gray-green in color.

The narrow long leaf is like a grass-blade, with an entire margin, fine texture, and smooth surface. It is pale gray-green, lighter underneath. The leaves are set close on the stalk, the arrangement being alternate, and near together.

The flower is 2-lipped; the lower lip is 3-lobed, the middle lobe being short and small, with a swelling above, which nearly closes the throat of the corolla; the base of the lip is prolonged into a slender, pointed spur; the upper lip is 2-lobed, the divisions bend outward and over the lower lip; the texture is fine, and smooth, the throat being lined with a glossy plush-like down; the color is a pure lemon yellow, the protuberance on the lower lip golden-orange. The 4 stamens are pale with cheese-colored tips; the pistil is tipped with green. The small calyx is 5-parted, and green. The flowers, on short small footstems, are arranged alternately, and close, in a terminal spike, the spurs turning downward.

A charming feature of the blossom is the arch of the meeting tips of the long pair of stamens above the shorter pair and the little pistil; the two rows of orange velvet that run down the inside of the corolla are also highly ornamental. This plant is a prime favorite with children, but few among grown observers stop to consider the admirable clarity of its lemon and orange hues. It is gregarious and grows in colonies.

BUTTER-AND-EGGS : Linaria vulgaris.

Wild Toad Flax. *Linaria Canadensis.*

Found on sandy barrens during August and September.

The very slender and delicate stalk (from 10 to 12 inches in height) branches a little; its leafage is sparse, and it is very smooth and shining. In color light green.

The small leaf is narrow and fine-pointed, with an entire margin; the texture is rather thick, and the surface is smooth; light green. The leaves are set upon the stalk alternately, and at regular intervals.

The small flower is 2-lipped, with a spur; the upper lip is divided into 2 sharp little points, the lower lip is larger and cut into 3 rounding scallops,—it presses against the upper with a prominent swelling near the throat of the corolla, the curving spur is thread-like; the texture is thin, and the color is a delicate lavender, with a white spot on the under lip; the calyx is 5-parted, and green. The flowers are set on short fine stems in a dainty terminal spire.

The stalk springs from a little mat of very leafy shoots, which lie on the ground, spreading outwards from the root. In color and general trigness of bearing this pretty plant presents a superficial resemblance to the Lobelias.

WILD TOAD FLAX : L. Canadensis.

Cow Wheat. *Melampyrum Americanum.*

Found on the borders of light woods from July to September.

The stalk is 4 to 6 inches,—or perhaps more,—high; it is branching, leafy, woody-fibred, and slightly rough to the touch. In color, reddish-gray.

The lower leaves are long and narrow, with entire margins; the upper are broader and cut at the base into long spine-like notches; the surface is slightly rough. Color, yellow-green, growing lighter toward the flowers. They are set on the stalk in pairs.

The inconspicuous flowers are tubular and 2-lipped; greenish white, the lower lip being pale yellow; their calices 4-cleft, small, and green. They grow singly from the angles of the upper leaves.

The shadowy stamens, seen under the arch of the upper lip, are vaguely suggestive of an eye. This is a tidy little plant, with no pretensions to beauty.

COW WHEAT : Melampyrum Americanum.

Figwort Family.

Monkey Flower. *Mimulus ringens.*

Found in the wet grounds of waysides and meadows, from July to September.

The branching and leafy stalk, from 1 to 2 feet in height, is square, slightly grooved, fine-fibred, and smooth. In color green.

The leaf is a narrow, oblong shape, tapering to the tip, with obscure notches, fine texture, and smooth surface; color, green. The leaves grow opposite to each other, partly clasping the stalk.

The corolla is 2-lipped, the upper lip being erect and 2-lobed, the lower 3-lobed, with 2 small swellings near the tightly-closed throat; the color is a clear light violet, with 2 yellowish patches near the throat. The pistil, and 4 stamens, which are divided into a long and a short pair, are all whitish. The 5-angled, and 5-pointed, green calyx is tinged with dull violet color. The flowers are set on short stems that spring singly from the angles of the upper leaves.

Only a few flowers open at one time, and the plants themselves grow sparsely, by twos and threes, among the sedgy grasses of damp hollows, where its clear color and neat leafage render it attractive to the sauntering observer.

MONKEY FLOWER: Mimulus ringens.

Turtle-head. *Chelone glabra.*

Snake-head.

Found, in low and swampy ground, during August and September.

The single stalk (from 1 to 2 or 3 feet high) is large, and square, and grooved on the two opposite sides; it is tough-fibred, and hollow; rigid in gesture. In color, a light yellowish-green.

The long, narrow, oval leaf tapers gradually to a long tip, has a sharply toothed margin, and strongly marked ribs; it is of a coarse tough fibre although its surface is smooth. Its color is dark green, lighter underneath. The leaves, on very short stems, occur in pairs.

This curious flower is 2-lipped; the upper lip is arched, and folded together with a slight notch in the middle of its margin, the lower lip is 3-lobed; the throat is compressed and filled within by woolly hairs. In texture the corolla is smooth and leathery; in color it is dull white, or sometimes tinged faintly with pink. Under the arched upper lip the tips of the dark, wool-covered stamens show. The calyx, formed of 5, distinct, oval, pale green parts, is surrounded by broader leafy bracts. The flowers grow in short, crowded, terminal clusters.

The resemblance to the turtle or snake is most apparent in the bud where the reptile-like mouth is quite pronounced. The plant lurks among the sedges of swampy lands, and is generally unattractive, for its foliage is almost always so eaten by insects that a perfect leaf is rarely to be found.

TURTLE-HEAD : Chelone glabra.

BROOM-RAPE FAMILY.

OROBANCHACEÆ.

Beech-drops. *Epiphegus Virginiana.*

Found growing from the roots of beech trees, in August, through October.

The tough, branching stalk, from 6 to 12 inches high, is brown, inclining to reddish.

There are no leaves, and only a few dry, and unnoticeable scales occur occasionally on the stalk.

The flowers are of two kinds, the upper sterile ones have long, small, 4-notched tubes, and are dull purplish and yellowish-brown in color; the lower seed-bearing flowers appear always as small buds. They are set on short foot-stems, and are irregularly scattered along the branches.

This is a parasite, drawing its life from the root of the beech; where it looks like a dry or dead twig sticking up from the ground. It emits a most unpleasant odor.

BEECH-DROPS: Epiphegus Virginiana.

VERVAIN FAMILY.

VERBENACEÆ.

Blue Vervain. *Verbena hastata.*

Found in dry grounds, waysides and fields, in July and August.

The large stalk, from 4 to 6 feet in height, is 4-angled and grooved down the sides; it is stout, roughish, and green.

The short-stemmed leaf is long, narrow, and tapering, with a sharply toothed margin, a strongly curved midrib, and a coarse texture, with a roughish surface; in color dark green. The lower leaves are more or less 3-cleft. The arrangement is opposite.

The small tubular corolla is 5-parted, and colored a rich dark blue-purple; the green of the calyx is also tinged with purple. The flowers grow in slender spires, which are grouped in an open pyramidal cluster on the top of the stalk.

The flowers at the foot of the cluster open first, only a few at a time; as the flowering continues upward there is left behind an ever-lengthening line of purple tinged calices which add greatly to the beauty of the bloom, and supply the unifying color in the general scheme of purple and green. Seen in masses, illumined by the sunlight, the color is rarely dark and rich. The bumble bee is a devoted friend to the Vervain, and may often be seen in the early evening, sleepily clinging to the flowery spire he has chosen for his night's lodging.

BLUE VERVAIN : Verbena hastata.

Vervain Family.

White Vervain. *Verbena urticafolia.*

Nettle-leaved Vervain.

Found in waste places and roadsides, from July to September.

The branching stalk grows from 1 to 2 feet high, and is 4-sided, each side being grooved down its middle; it is strong-fibred, and rough-hairy, and green.

The oval leaf tapers to the tip, is coarsely toothed, and loose-fibred: its surface is hairy, and its color dark green. The leaves, on short stems, are placed upon the stalk in pairs.

The small, inconspicuous, white flower is 5-pointed. They are clustered in long slender spires, from the top of the stalk, and the angles of the upper leaves.

The leafage of the White Vervain bears a resemblance to the noxious Nettle, that at first sight would lead us to condemn the plant as unworthy; a closer observation bestowed upon the graceful gesture of its flowering spires will rescue its name from the limbo of "weeds."

WHITE VERVAIN : V. urticæfolia.

Lop-seed. *Phryma Leptostachya.*

Found in light woods in July.

The large stout stalk bears slender branches, grows from 3 to 4 feet in height, and is square, hollow, and woody-fibred; it is smooth, or covered sparsely with small hairs, and grooved at the joints. Green, dashed with bronze, the branches sometimes purplish.

The lower leaves are large, broadly oval, and tapering to a sharp point, and sit on long trough-like stems; the upper are small and narrow. They have irregularly toothed margins, are thin in texture, and hairy; green in color. They are set on the stalk in pairs with a noticeable joint, the pairs occurring at right angles, and at a considerable distance apart.

The very small corolla is 2-lipped; the lower lip is 3-parted, the upper and smaller being 2-parted, and their color is light crimson with a violet tint; the long, dull green calyx is 2-divided, the upper division being longer, with 3 curving crimson tips. The flowers are arranged in pairs, at right angles to each other, in slender spikes, whose long stems bear one or two pairs of little leaves midway their length.

The blackish seed-pod is the oddest feature of this plant; it is grooved, and sharply turns down upon the stem, its little curved hooks bristling with expectation of getting a clutch upon a way-farer.

LOP-SEED : Phryma Leptostachya.

MINT FAMILY.

LABIATÆ.

Gill-over-the-Ground. *Nepeta Glechoma.*

Ground Ivy.

Robin-run-away.

Creeping Charlie.

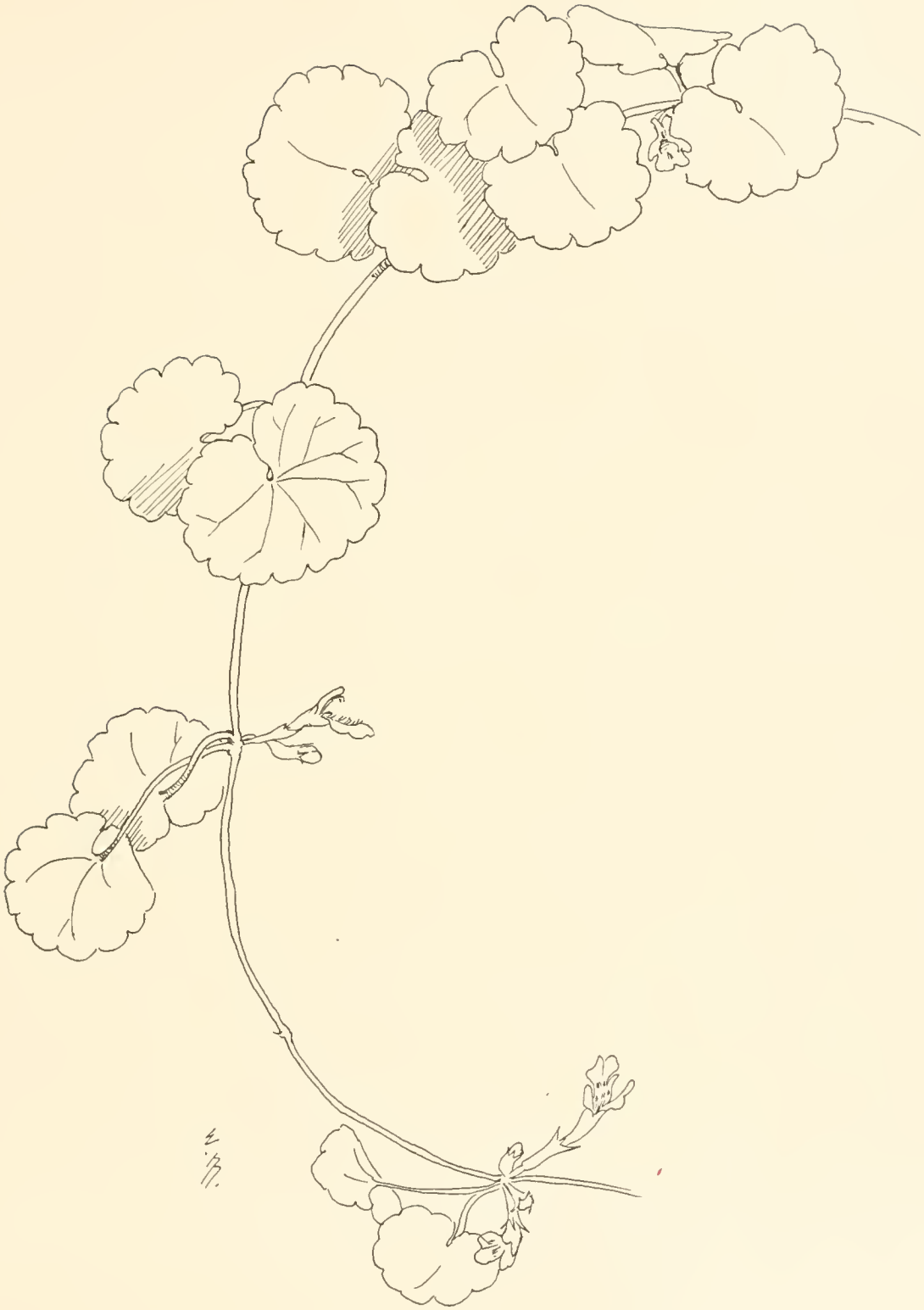
Found in dooryards and roadsides, amidst grass, in May.

The trailing stalk is leafy, square, and somewhat hairy; pale green in color.

The leaf is nearly round, with a heart-shaped base, the margin cut in large rounded scallops, and the surface soft hairy to the touch; the color is green, often sprinkled with lighter, mouldy-looking patches. The leaves, on curved stems, grow in pairs.

The flower is 2-lipped; the upper lip slightly parted, the lower being more broad and spreading, and 3-cleft,—the middle lobe notched. The color varies from light to darker blue-violet, the lower lip and throat being spotted with small specks of reddish-violet. The tubular calyx is 5-parted, and green. The flowers, on short stems, spring from the angles of the leaves.

Introduced from England into our gardens, the one desire of this "natural born" rover seems to be that of escaping from bounds,—to run away riot on the green sward, under the hedge, and so out on the highway.



GILL-OVER-THE-GROUND: Nepeta Glechoma.

Catnip. *Nepeta Cataria.*

Found from July to September, on the roadsides, and about dwellings.

The large square stalk is branching, and rather leafy; it grows between 2 or 3 feet high, and is strong-fibred, downy, and grooved down the middle of each side; its color is light gray-green.

The broad oval leaf is heart-shaped at the base, the edge is cut into large rounded scallops, and the surface is downy. In color it is a grayish-green. The leaves, on very short stems, grow in pairs.

The small flower is 2-lipped; the upper lip is erect, and notched in the middle of the margin, the larger lower lip is 3-lobed, the middle lobe being much the largest. Its color is a lavender tinted white, spotted with lavender dots. The small, tubular, 5-pointed calyx is green. The flowers grow upon the stalk in short spike-like clusters.

The Catnip has a pungent, mint-like odor. It is somewhat sprangling in growth, and only a few flowers open together; but the heart shaped leaf is most pleasing to the touch, because of its fine silky texture.

CATNIP: N. Cataria.

Bee Balm. *Monarda didyma.*

Oswego Tea.

Found in July (but occasionally later in the season also), in the shade of moist woods, frequently near water.

The stalk grows from 1 to 2 feet high, and is noticeably square; it is juicy, hairy and rough to the touch. In color, light green, with a red ring at the joints.

The leaf is oval, broad at the base, and tapering to a long, sharp point, many ribbed, with its margin coarsely notched, and rough with hairs; green in color. The leaves, on short, hairy, red stems, grow in pairs, which are at alternate angles with each other.

The conspicuous flower is tubular, very small at the base, spreading wide in the throat, and 2-lipped; the upper lip is very narrow, sharp-pointed, and curving, the lower lip is larger, spreading, and often 2-cleft; the texture is fine and delicate. The pistil and 2 long, slender stamens protrude from under the tip of the upper lip, and, like the corolla, are colored a full, glowing red. The small calyx, with its round, narrow-throated, and 5-pointed tube, is of a papery texture, and finely grooved; in color it is a duller and darker red than the corolla. The flowers are set in a large terminal head, that is surrounded by a row of drooping, oval, smooth, red leaf-like bracts.

These bracts, while bright in color, do not possess the rich fullness of hue which belongs to the flowers themselves: just beneath them a pair of stalk-leaves crowd up close, and are each adorned with a dash of scarlet, as though the dye had spilled over from the blossoms. The buds open in the center of the head first, and continue blooming in rings, outward. Not even the Cardinal Flower produces a more vivid effect than a group of these brilliant flowers, standing beside a pool of dark water, in the heavy shade of forest trees.

BEE BALM : Monarda didyma.

Wild Bergamot. *Monarda fistulosa.*

Found in the dry soil of roadsides and pastures during July and August.

The smooth square stalk is slightly grooved, and somewhat slender, though strong in fibre; it grows from 2 to 5 feet in height, and branches only for the flowers. Color, green tinged with dull violet.

The leaf is oval, broad at the base, and tapering to the point; its margin is sparingly notched, the texture is exceedingly fine, and the surface is soft to the touch. It is aromatic in odor. The color is grayish-green, the midrib being lighter.

The flower is 2-lipped, with a long slender tube, and the pistil and 2 stamens project beyond the upper lip; they are colored like the corolla, a clear fine lavender. The small, tubular calyx is minutely 5-pointed; of a green color that is tinted with dull violet. The flowers grow in large terminal heads, which are set about by a row of small, light green leaves (bracts).

The flowering begins at the center of the head, and continues in ever-widening whorls, leaving behind them a slightly rounded disc of small tubular calices, resembling a honeycomb,—the intermingled green and lavender in this disc form a pleasing note in the color-scheme of the plant, whose leafage is unusually fine in texture, as well as tone.

WILD BERGAMOT : M. fistulosa.

Hyssop. *Hyssopus officinalis.*

Found along roadside banks, near human habitations, during July and August.

The stalk is 8 or 12 inches high with many leaves and trig little branches; it is square, tough-fibred, slender, and smooth. The color is light green, inclining to a blue-green,—reddish near the foot.

The long and narrow leaf has a blunt-pointed tip, an entire margin, and shows only its midrib; the texture is thick and a little stiff, and the surface is very slightly rough. In color it is a fine gray-green, with a hint of the rich color of the flower. The leaves grow upon the stem in clustered pairs, which occur at right angles to each other.

The small tubular flower is 2-lipped; the narrow upper lip being 2-cleft, while the wider lower lip is 3-cleft, with its middle and largest lobe cut into 2 scallops. In texture the corolla is fine and thin, and in color it is a deep and strong purple-blue. The 4 stamens, and the pistil, are long, and curve out from the hollow of the upper lip,—they are bright blue, and their tips, at first a rich red, become white as they mature. The small 5-pointed calyx is reddish, with a fine green bloom. The flowers grow in close groups of 3 or 5, in the angles of the leaves, and form an irregular one-sided terminal spike.

This plant affords a perfect example of color-harmony, with its contrasting absolute purplish-blue corolla, and deep red stamens, brought into unity by the purple-toned green of its leaves. It has a strong and pungent scent.

HYSSOP : Hyssopus officinalis.

Self Heal. *Brunella vulgaris.*

Heal All.

Thimble-flower (Vt.)

Found everywhere, among short grass, from July to September.

The stalk (from 6 to 12 inches high) is more or less reclining in habit; it is leafy, and branching slightly, thick, square, with grooves on its two opposite sides, tough-fibred, and smooth. In color, light green.

The leaf is long, oval with a tapering tip, a sparsely notched, or entire margin, and a smooth surface. Its growth, on short stems, is in pairs. Green in color.

The flower is irregularly 2-lipped, the upper lip hoodlike, and the lower 3-lobed, the middle lobe being largest and fringed on its edge. The color is violet, the hooded lip is generally darker than the other parts of the corolla; the buds are much deeper in color than the blossoms. The lower division of the 2-parted calyx has 2 long points; a broad heart-shaped bract supports its base; in color it is green with a violet tinge. The flowers grow in an elongated, or thimble-shaped head, on the end of the stalk, and from the angles of the upper leaves.

The clear violet of the corolla is brought into harmony with the leaf-green, through the violet tinted calyx which supplies the unifying color. The plant's habit of growth is sprangling, for the stem, which seems strong-fibred in itself, is given to lopping weakly upon surrounding vegetation.

SELF HEAL : Brunella vulgaris.

Motherwort. *Leonurus Cardiaca.*

Found in blossom through July and August, on waste grounds around dwellings.

The large, stout, square stalk grows from 3 to 4 feet high ; it branches, is very leafy, and of a dull purplish color.

The upper leaves, long and taper-pointed, are sharply notched, with 3 strong ribs ; the lower leaves are more deeply cut, and broader than the upper ones, and are set on longer foot-stems. The texture is coarse, the surface soft-hairy, and the color dark green. The leaves grow near together, and point out in all directions, around the stalk.

The small 2-lipped flower has the upper lip slightly arched, and the lower one 3-lobed ; there are 4 stamens under the hood of the upper lip ; the outside of the corolla is covered with silky hairs ; the color is a dull pink. The 5-pointed, green calyx becomes rigid, and bristling with age, and is persistent on the stalk after the flowers have disappeared. They grow in close whorls around the stalk at short intervals.

Motherwort is effective from the distance, with its many alert leaves, and close flower-whorls threaded on its long stalk ; it is a favorite with the bees, and is cherished for their sakes by the bee-keeper. It has been naturalized in this country from Europe—perhaps purely for the profit of the bee?

MOTHERWORT: Leonurus Cardiaca.

Wild Mint. *Mentha Canadensis.*

Found on moist banks, beside running water, commonly in the shade, from July to September.

The branching, leafy stalk is square, coarse-fibred, hairy, and about 1 or 2 feet in height. In color it is pale green, sometimes bronzy.

The long leaves are pointed at both ends (except the upper leaves, which are wider at the base), with notched margins, midribs prominent underneath, and a coarse texture, the upper surface being rough, while the underside is hairy; green. They are set on short stems, and grow in pairs, at opposite angles to each other.

The corolla of the very small flower is shaped like a 4-divided tube, the upper division being notched at its tip: it is white, or faintly tinged with pink or lavender; the hairy calyx is pale green, or pinky. The flowers are arranged in close rings about the stalk, in the angles of the upper leaves.

The scent of this plant resembles Pennyroyal, though less strong.

WILD MINT : Mentha Canadensis.

Spearmint. *Mentha viridis.*

Found in old orchards and in upland pastures, by runnels, or wet hollows, during August.

The stalk (from 1 to 2 feet in height) bears branches in pairs; it is square, firm-fibred, and smooth. The color is green, with a purple tone.

The oval leaf, with its tapering, long tip, has a notched margin, is much veined, and is coarse in texture, while its surface is a trifle glossy. It has a strong aromatic flavor to the taste. In color it is green, showing the same red-purple of the stems at the ribs and margins. The leaves are set in pairs that spring at right angles to each other.

The very small tubular corolla is 4-divided, and dark lavender in color; the 5-parted calyx is green. The flowers are set in whorls about the stalk, with a space between each whorl,—beneath each ring of flowers, and supporting it in its place, are seen a pair of little purple-tinted bracts.

According to personal observation, the buds become dark purple in color on the south side of the stalk before those on the north side have lost their green. This is one of the nattiest of the Mints in growth, and is held in especial affection by children.

SPEARMINT : M. virides.

Peppermint. *Mentha piperita.*

Found along meadow runlets and brooks,—near clear water,—in August.

The branching, leafy stalk, from 12 to 15 inches high, is square, woody-fibred, smooth, and shining. It is a noticeably dark purple-tinted green, sometimes reddish.

The leaf is oval with a broad base and sharp tip, the margin is toothed, its ribs are noticeable, and texture thin, the under surface being slightly rough, although the upper is velvety; its color is green, toned with purple, which shows upon the upper side of the midrib and along the edge. The leaves are set on short purplish stems, and arranged in pairs, which grow at right angles to each other.

The very minute flower has a 2-lipped tubular corolla, the upper and lower lips being cleft, or faintly notched, in the middle; it is lavender, and so is the pale projecting pistil. The calyx is 5-parted, very slightly hairy, and green-purple in color. The flowers are arranged in compact whorls, and form a close, short, round, terminal spike.

Its pungent odor and taste are the most commonly noted traits of this Mint, but the rich-toned shining stalk is more worth observation.

PEPPERMINT: M. piperita.

American Pennyroyal. *Hedeoma pulegioides.*

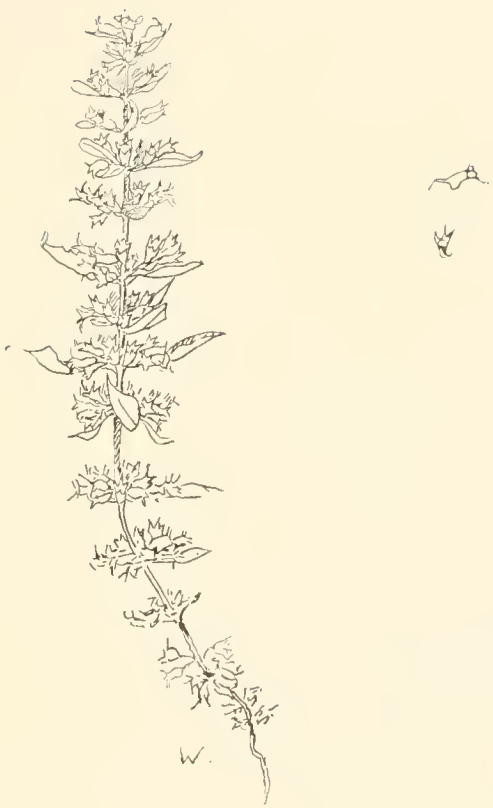
Found, from July to September, in upland fields and pastures.

The sometimes branching stalk is slender, but strong in fibre; it grows from 5 to 10 inches high, and is hairy to the touch. Green in color.

The small leaf is long-pointed, with a slightly toothed margin, and somewhat roughened surface. It is medium green in color. The leaves, on slight stems, are set in pairs, which occur closely, and at right angles to each other.

The corolla of the very small flower consists of a downy 2-lipped tube, the upper lip being largest, flat, and notched at the tip, the lower 3-cleft; it is lavender in color. The small calyx is 5-parted. The flowers are set, on tiny stems, in rings about the stalk in the angles of the leaves, forming a terminal spine.

The perfume of the Pennyroyal is carried to a considerable distance, —were it not for this aromatic pungency the casual observer would often fail to find its haunt, so closely does it keep itself among the grasses of the pasture.



PENNYROYAL : Hedeoma pulegioides.

Hemp Nettle. *Galeopsis Tetrahit.*

Found in waste places, from July to September.

The stalk grows to be 1 or 2 feet high; it is branching, and 4-angled, and swollen beneath the joints; coarse in fibre, and thickly covered by stout bristle-like hairs. In color dark green, or dull purplish-red at the joints.

The long-pointed oval leaf is many ribbed, with a coarsely notched margin, thin but coarse texture, and roughened by hairs. Its color is dull green, lighter underneath. The leaves, on their hairy reddish stems, grow in pairs which spring at right angles to each other.

The small tubular corolla spreads into 2 divisions, the upper being erect and arched, the lower 3-cleft with a slightly heart-shaped middle lobe; its color is pink or lavender. The 4 stamens stand erect under the upper lip. The hairy, green calyx is bell-shaped, with 5 bristling points. The flowers are set (supported by tiny hairy bracts) in whorls, in the angles of the upper leaves.

A large variety, *G. grandiflora*, is often found in the same localities; the difference lies in the larger size of the corolla, which is clear white in color prettily marked with purple on its lower lip, and in the rounder shape of the calyx. Both plants are unpleasant to the touch because of their harsh bristle-like hairs.

HEMP NETTLE : Galeopsis Tetrahit.

Blue Curls. *Trichostema dichotomum.*

Found on dry sandy plains and in open fields, in September.

The branching, leafy, and erect stalk grows from 6 to 12 inches high; it is strong and woody-fibred, not noticeably square as is usual among the Mints, minutely hairy, and soft to the touch. Its color is green, reddish near the root.

The leaf is oval, with an entire margin, and is nearly smooth to the touch. It is green in color. The leaves, on short stems, grow in pairs. They are strong scented.

The corolla is irregular in shape; 5-lobed, 4 of which are equal in size, slightly pointed, and erect or bent slightly forward, while the remaining lobe is long, narrow, and down-curving; in color a deep violet-blue. The 4 stamens and the pistil are long, pale, or reddish-violet; the green calyx is 5-parted. The flowers are set on short stems from the ends of the branches.

The blossom opens in the early morning sunlight. At first the pistil and stamens extend beyond the flower in a long curve, but as the day advances their tips gradually draw inwards until they are brought into the throat of the corolla, and thus become the little blue curl which gives the plant its bye-name; by three o'clock of the afternoon the curl is completed and the flower falls. Its odor is strong, with a rank resemblance to the Pennyroyal.

BLUE CURLS : Trichostema dichotomum.

POKEWEED FAMILY.

PHYTOLACCACEÆ.

Pokeberry. *Phytolacca decandra.*

Garget.

Pigeon-berry.

Found in meadows and waysides, from July to September.

A plant, from 5 to 9 feet high, with many branches and leaves; the stalk is stout, and large (from 1 to 2, or more, inches in diameter), and round; it is hard-fibred and smooth; in color a dull crimson.

The large leaf is oval, tapering to the tip, and set on a very short stem; the texture is exceedingly fine, and smooth, and the color a rather dark and grave green. The arrangement is alternate.

The small 5-parted flower is white, tinted on the outside with crimson; the seed-box in the center is green. The flowers, on short, pale crimson foot-stems, grow in elongated terminal clusters upon crimson stems.

The blossoms begin to open at the base of the cluster and continue upward, leaving behind the partly formed berries; when ripe they form a cluster of blue-black fruit, smooth-skinned, and with an abundant crimson juice. The Pokeberry is a plant of homely gesture and a rather strong odor, redeemed by its luxuriant growth, and the fine quality of its foliage. The berries are favorites of children who squeeze them to use their deep magenta-crimson juice for writing and painting and dyeing purposes.

POKEBERRY : Phytolacca decandra.

BUCKWHEAT FAMILY.

POLYGONACEÆ.

Red Sorrel. *Rumex Acetosella.*

Sheep Sorrel.

Horse Sorrel.

Found everywhere in impoverished soil during May and June.

Many slender, leafy stems from 6 to 12 inches in height, and bearing flowers terminally, spring from a foot-tuffet of leaves.

The lower leaves are pointed, with long and flaring wing-like bases ("halberd-shape"); they are set on long grooved stems; the upper leaves are similar in shape, or lack the winged bases, and are set on short stems. Their margins are entire and their texture is thick, juicy, and porous, with a smooth surface; gray-green in color. They are acid to the taste.

The very tiny flower has 6 petal-like parts, and many stamens, and is in color a bright yellow-green, turning to reddish- or crimson-tawny. The flowers are arranged irregularly on branching stems in a feathery spire.

Spreading by underground runners, the Red Sorrel colors the dry fields of early summer with its rich hues, and children love its fresh leaves for their tart flavor; but few give its feathery plumes their meed of praise, since it is nothing more than "a common weed."

RED SORREL : Rumex Acetosella.

Tear-thumb. *Polygonum sagittatum.*

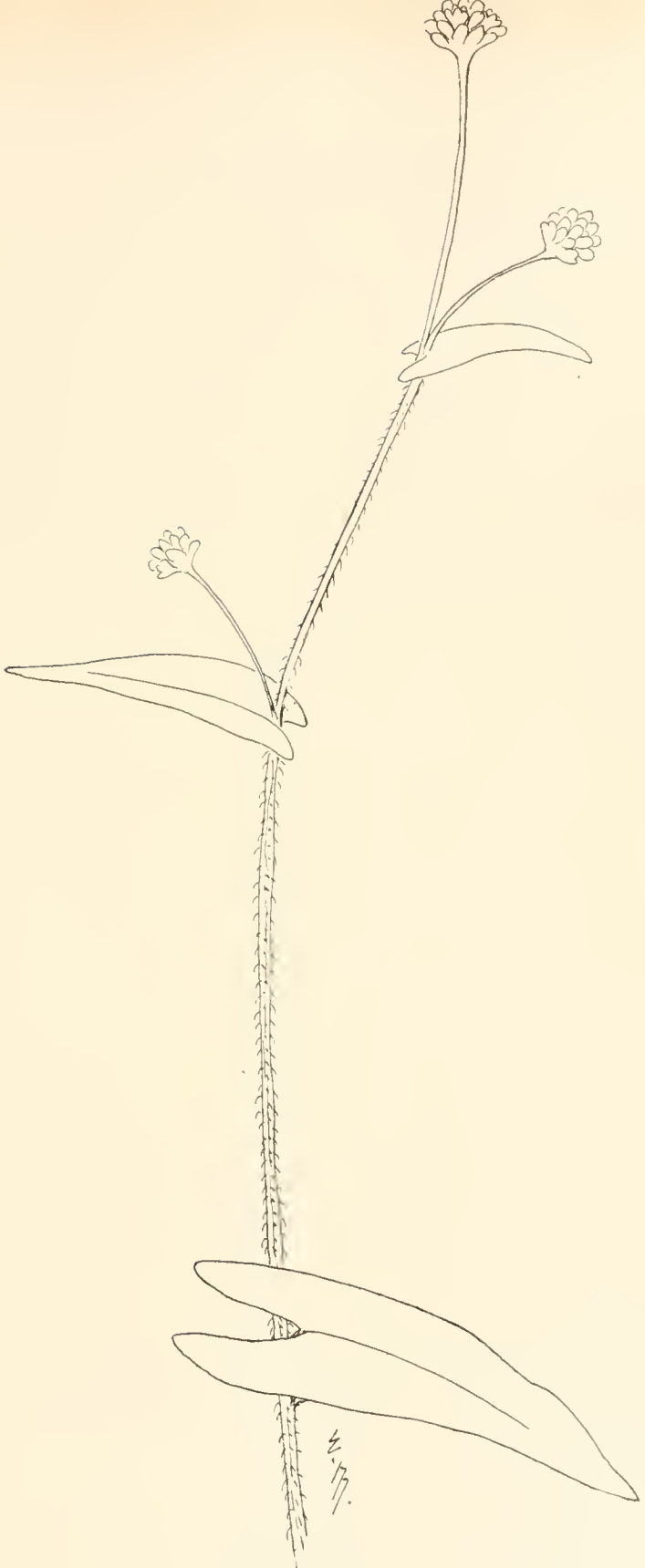
Found blossoming on swampy ground, and along ditches, from July to October.

The weak-fibred, 4-angled, stalk, armed on the angles with sharp saw-toothed prickles, that point downwards, is green in color.

The long arrow-shaped leaves have short foot-stems, and grow singly, at long intervals; they have entire edges, and a smooth surface, though the back of the midrib is set with small prickles; they are fine in texture, and of a dark green color.

The little 5-parted flowers, white, or rose colored, grow in small close heads, on the ends of smooth foot-stems, from the angles of the upper leaves.

The leaves are pretty in shape and color, though so far apart as to make small impression on the passer-by; the lopping stalk supports itself on the surrounding vegetation by means of its backward pointing prickles; it turns a russet-red in autumn. A shining, brown, 3-angled seed is developed within the long-lasting flower.



TEAR-THUMB: Polygonum sagittatum.

Knotweed. *Polygonum Pennsylvanicum.*

Found in barrens and waste places in August and September.

Branching much and sprawling in manner, this plant grows from 1 to 3 feet in height; it is jointed, noticeably shining, and smooth except for the new growths and flower-stems which are rough with hairs. Its color is green, somewhat red at the joints, which are covered loosely by sheaths of a coarse weak fabric.

The leaf is long-pointed at each end, and roughened by hairs on the ribs, edges, and upper surface; the texture is flimsy, and the color a crude green. The arrangement is alternate.

The small and inconspicuous flowers are 5-parted, and vary from pink to green-white in color; they are tightly and irregularly bunched in a terminal club-shaped spike, with a little leaf at its base,—frequently a second bunch of flowers occurs a little lower down the stem.

Found commonly in great masses the plant serves to hide the ugly remnants man casts into the fields it chooses for its habitation.

KNOTWEED : P. Pennsylvanicum.

Polygonum amphibium.

Found in swamps in September and October.

The single stem, 3 or 4 inches high, bears a few leaves, and is large, round, hollow, and juicy; a dull reddish-green color, that is dark near the foot.

The leaf (varying from 2 to 5 inches in length) is oblong with a pointed tip and wedge- or heart-shaped base, an entire margin, and prominent midrib; it has a thin, leathery texture, and a very smooth shining surface; in color it is dark green, much toned with dull red, the midrib lighter. The leaves, on short stout stems, clasp the stalk with a dry, red-brown sheath enfolding the joint; they are placed alternately.

The flowers are 5-parted, the tips of the divisions seldom spreading, of a bright rose-pink, coarse hue. They are gathered in a close club, set on a short, terminal, green stem.

The lower of the three or four leaves float upon the surface of the water or lie on the mud of this plant's miry home.

—— P. amphibium.

BIRTHWORT FAMILY.

ARISTOLOCHIACEÆ.

Wild Ginger. *Asarum Canadense.*

Found in rich soil in woodlands, blossoming during May.

The very short stalk barely shows above the ground ; it is large and stout and fibrous, bearing two or three sheaths and terminating in the flower, and the leaf-stems which are from 4 to 8 inches in length.

The large wide leaf is heart-shaped or rounded, with an entire margin, and strongly marked by the ribs and veins ; the upper surface is velvety to the touch, while it is rough and woolly underneath, and the color is a strong green, whitish beneath. The stem is stout, erect, and slightly woolly. Two or three leaves only are borne on the summit of the stalk.

The flower has no petals ; the calyx is shaped like a deep, round cup, 3-parted at the top, with curling margins. It is coarse and firm in texture, with a hairy surface ; the outside dull purplish, the divisions reddish-brown or bronze, and the inside of the cup creamy white curiously marked in the bottom by a hexagonal design in purple ; the 12 stamens are gathered close about the 6-parted pistil. The single flower is set on a short, bristly stem, that springs from between the leaves, and turns downward, the blossom resting its face upon the earth and burying itself so carefully in the leaf mold that only search reveals it.

Later in the season the leaves attain a considerable size, four or five inches across ; they are always decorative in shape and color. The root is aromatic, and sharp to the taste,—whence the folk-name.

WILD GINGER · Asarum Canadense.

LAUREL FAMILY.

LAURACEÆ.

Spice-bush. *Lindera Benzoin.*

Fever-bush.

Benjamin-bush.

Wild Allspice.

Found flowering in April in damp soil and light shade.

A branching, slender shrub from 4 to 12 feet in height, of a woody fibre which is rather easily broken. The bark is smooth and firm, slightly glossy, and gray-brown, inclining to reddish when young.

The leaf is broad oval in shape, with a sharp tip, and set on a short stem; the margin is entire, the texture thick and tough, and the color is a rich dark green, paler underneath. The arrangement of the leaves is alternate, and they succeed the flowers in unfolding.

The flowers, small and indeterminate in shape, are thin and fragile in texture, and greenish, or lemon-yellow in color; they have 6 narrow petal-like parts, and many fine yellow stamens, with bright orange tips. They are set on little foot-stems, in small clusters within the protecting grasp of two pairs of small temporary envelopes, the outer pair golden brown and bark-like, the inner resembling the flower. These little clusters occur close together all along the branches.

Blossoming amidst the gray woods of the early spring this golden odorous shrub is a delightful surprise. The little leaf-bud is seen pushing its way forth from between the flower-clusters before the blossoms are fairly spread.

SPICE-BUSH : Lindera Benzoin.

MEZEREUM FAMILY.

THYMELÆACEÆ.

Leatherwood. *Dirca palustris.*

Moosewood.

Found in light moist woodlands in April.

A shrub, from 2 to 4, or 5, feet in height, branching in an angular fashion; the smooth close bark is very flexible and tough, gray-brown, and slightly shining, dotted with lighter color.

The oval leaf is entire, strong-fibred, and smooth, and set on a very short stem. The arrangement is generally alternate, and the color a full green.

The small tubular flower, with slightly notched edges, and a thin texture, is of a beautiful golden yellow color; the 8 orange-tipped stamens and the pistil hang from the mouth of the tube. The flowers droop in small clusters from the hold of three or four bracts which are beautifully smooth and green on the inside, and thickly covered with a fine purplish down on the outside; they are set irregularly along the branches.

It is stated in Gray's *Manual* there are as many temporary bracts as there are flowers, but no hard and fast rule is observed in nature in such details; according to personal observation 4 is the usual number. These bracts fall as soon as the leaves push forth. It is noted that the flowers lose their color as the leaf-buds swell, although they do not wither until the leaves are unrolling. The bark is so elastic and tough that a knot may be tied, without its breaking, in a stem as big as the little finger. The first glimpse of this gray bush strung with its golden jewels and never a trace of green about its branches, gives a pleasure akin to the more spiritual delight of beholding the Wych Hazel which occupies the same place in nature at the other end of the flower year.

LEATHERWOOD : Dirca palustris.

SWEET-GALE FAMILY.

MYRICACEÆ.

Sweet-fern. *Myrica asplenifolia.*

Found in April, on dry uplands and along copse borders.

A tough-fibred bush, from 1 to 2 feet high, with many low branches, very leafy, the bark rough, and reddish, or when old covered by a gray bloom.

The long narrow leaf is cut to the midrib into many narrow and irregular lobes, with an entire or slightly notched margin, and a thin texture; the surface is smooth above, and rough underneath; the color a cool strong green. The leaves are set on short foot-stems, placed irregularly and close together. They come following after the flower catkins.

The pistil-bearing flowers gathered in an inconspicuous crimson cluster, like a scrubby little paint brush, and the stamen-bearing flowers, borne in the form of a slender green and brown catkin, are often found on the same plant; they grow close to the ends of the stalk in small groups.

After the blossom season is over, the plant puts forth its thick foliage, and so flavors the air from earliest spring till near midwinter, with the sweet aroma which belongs to both leaf and flower. Though not evergreen, the dried leaves often cling to the bushes until the new growth displaces them. This is a genuine New England colonist of our sterile pasture hills, growing in large clumps and groups with hardy persistence.

SWEET FERN : Myrica asplenifolia.

ORCHIS FAMILY.

ORCHIDACEÆ.

Gay Orchis. *Orchis spectabilis.*

Showy Orchis.

Spring Orchis.

Found in May, in deep wet woods.

The large, single, flower-stalk reaches about 6 inches in height, and springs from between a pair of root-leaves; it is smooth and elastic. Pale green in color.

The root-leaves are long (sometimes about 6 inches), broadly oval, blunt at the tip, tapering into a grooved foot; the margin is entire (as is true of all Orchids), the texture thick, and leathery. The upper side of the leaf is dull green, underside it is silvery with bloom. The leaves which occur along the flower-spike are long-pointed, erect, clasping, and alternate.

The lip of the flower is large, and spreading, with a flattened spur which is largest at the tip, and as long as the foot-stem; other petals small, club-shaped, and bent over like a hood; the calyx parts stand erect, their tips pointed. All parts of the flower are leathery, and thick in texture; and colored a pale pink-violet, except the lip, which is waxen white, tinted with yellow. It is set on a short, twisted foot-stem, in the clasp of a leaf-like bract. The arrangement is alternate, in a few-flowered spike.

This is a noticeably lustreless flower. The twist in the foot-stem is an interesting feature.

GAY ORCHIS : Orchis spectabilis.

Pink Lady's Slipper. *Cypripedium acaule.*

Whip-poor-will.

Found in the woods, frequently under evergreens, though sometimes in deciduous shade, during May.

The slender flower-stem, from 8 to 12 inches in height, is bent like a shepherd's crook, and bears on the curve a small, pointed, green leaf. It is hairy, and light green.

There are 2 root-leaves, large (from 5 to 7 inches long), oval, with a pointed tip, and a much clasping base; the ribs are parallel, and prominent, the margin is entire, the texture is loose, and somewhat coarse, and the surface is hairy. Color, green.

The lip of the flower is shaped like a large, hollow bag, slightly puckered on its infolded margin; the other petals are long, narrow, and twist, or curl, on either side of the bag; the calyx-parts are apparently only 2 (though botanists consider the lower is composed of two parts grown together),—they are placed above, and below the bag. The petal-like pistil is pink; the bag—of a loose texture—is a crude crimson-pink, inclining to violet, veined by many darker lines; the other parts of the flower—of a thin texture and hairy—are colored a dull reddish-brown, tinted with purple. The single flower hangs from the end of the stem.

In some localities pure white forms are frequently found, and sometimes a single stem will bear two blossoms placed back to back. A rank odor is observable, if the plant is rudely handled.

PINK LADY'S SLIPPER : Cypripedium acaule.

Large Yellow Lady's Slipper. *Cypripedium pubescens.*

Yellow Moccason Flower.

Found in May, about a week later than the Pink Lady's Slipper, among low growths in moist shade.

The single stalk grows from 1 to 2 feet; it is erect, or slightly bent aside, leafy, strong-fibred, and roughened by minute hairs. Color, green.

The leaf is a broad oval, with a sharp tip, many parallel ribs, of a loose-fibred texture, and hairy on the upper surface. Color, strong green. It clasps the stalk, and folds about it. Two or three or more leaves are placed alternately along the stalk; they diminish gradually in size.

The Yellow Lady's Slipper's rounded pouch, or bag, has a circular opening at the top, and is thick in texture, with a smooth and shining surface. The long and narrow side petals are much twisted, and curled; the two calyx-parts are broad-oval, the lower 2-cleft; they are ribbed, with slightly wavy margins. All these parts are thin and downy, and colored dull red, or brownish, or purplish, streaked with green; the pouch is bright yellow, streaked with dull red parallel veins. The flower is set, with an outward swinging gesture, on the tip of the stalk, which is enlarged just beneath the point of contact.

The blossom is faintly odorous.

LARGE YELLOW LADY'S SLIPPER : C. pubescens.

Showy Lady's Slipper. *Cypripedium spectabile.*

Whip-poor-will's Shoes.

Found in bogs and swamps, in July.

The leafy stalk, about 2 feet in height, is downy to the touch. Its color is green.

The large oval leaf tapers much at the tip, and clasps the stalk at the base; the many ribs are parallel, the margin is wavy, and the surface is roughish. In color it is a full toned yellowish-green. The leaves are alternate in growth.

The bag of this flower is large, rounded, and much inflated; it is white and crimson-pink in color, and set about by 4 white petal-like parts. The stamens and large pistil are white, tinged with yellow. From 1 to 3 flowers grow on the summit of the stalk.

This is a curious and showy flower, much sought because of its rarity; its leafage is full, and fine in its long lines and strong curves, and the four flying white pennants give the blossom a cheerful and animated expression.

SHOWY LADY'S SLIPPER : C. spectabile.

——— *Pogonia ophioglossoides.*

Found in swamps and other moist grounds during June and July.

The stalk grows between 6 and 9 inches high; it is smooth, and slender; the color is green.

The leaf is oval, with a thick texture, and smooth surface. Color, a rather light green. Only 2 leaves clasp the stalk, one about midway, and another, much smaller, quite near the flower.

The 5 petals and calyx-parts are long, and narrow, and spread apart to disclose the "bearded" lower petal (or lip); their color is a light rose-pink, the fringed lip being darker, with a pale yellow "beard." The flower is poised lightly upon the summit of the stalk.

This is one of the prettiest of our Orchids; its fragrance is fresher, and less heavy than that of many of its stouter relatives.

—— Pogonia ophioglossoides.

Calopogon pulchellus.

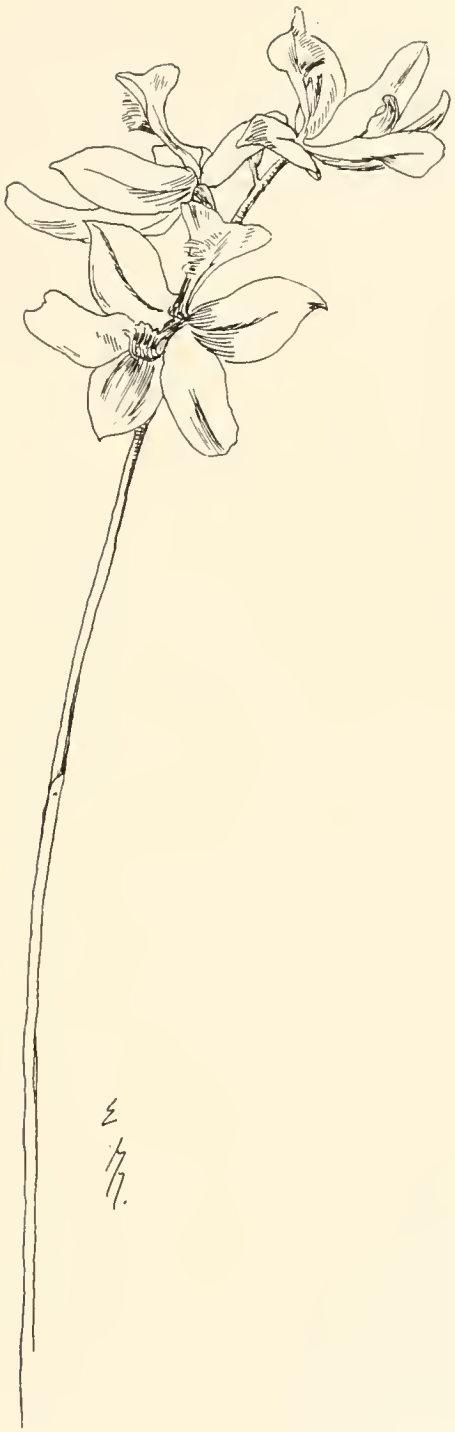
Found in swamps and wet grounds, in July.

The smooth, green, flower-stem rises directly from the root, to the height of about a foot.

One grass-like, green leaf grows from the root.

The lower petal of the blossom is wedge-shaped, with a prolonged base, and somewhat fringy in the center,—owing to the straightness of the foot-stem it points upward; the other petals and calyx-parts are pointed-oval in shape; the pistil is petal-like, and curling. The color of the flower is dark magenta, the fringes on the lip being magenta and yellow. From 2 to 6 flowers, on very short foot-stems, grow upon the single stem.

The lip is provided with a hinge, which permits it to fall, and rest upon the curling tip of the pistil beneath.



—— Calopogon pulchellus.

Early Purple Fringed Orchid. *Habenaria fimbriata.*

Meadow Pink.

Found on moist and shaded banks, or beside wayside rnnlets, in June.

The single, erect, and leafy stalk, which grows from 15 inches to 2 feet in height, is sharp-angled, somewhat twisted, and smooth to the touch. In color it is a cool, pleasing green.

The lower leaves are sometimes 6 inches long and about 2 wide, above they are small and narrow; the shape is a long-pointed oblong, deeply indented on the strong midrib; with an entire margin, and a smooth shining surface. The color is a cool dark green, silvery with bloom underneath.

The flower is large and beautiful. The lower petal, or lip, is widely spreading and deeply 3-cleft with a fine fringed margin, and a long and slender, curving spur; the other petals are sharp-pointed, their outer margins notched; two of the calyx-parts flare like wings at either side, while the third part is erect between the upper petals; the texture is very fine, and delicate. The color is an exquisite pale lilac, the lip being slightly darker, and fading to a pure waxen white at the throat; the spur is pale pink, or nearly white. The flowers, on fine, twisted and curved, green foot-stems, are arranged alternately, and close together, in a large feathery spire, each foot-stem springing from the angle of a small leaf or bract.

The blossoms are slightly odorous, as though no gift had been refused to this lovely Orchid. Not least among its delightsome qualities is the rich toned green of its leaf, contrasting with the fairy lightness of its blossoming spire.

EARLY PURPLE FRINGED ORCHID: Habenaria fimbriata.

Small Purple Fringed Orchid. *Habenaria psycodes.*

Found by roadside springs, or in low damp meadows, during July and August.

The stalk is sparingly leafy, round and smooth, and varies in height from 1 to 3 feet; light green in color.

The long leaf is sharp-pointed at the tip, thin but tough in texture, and smooth; in color yellow-green, not dark. The leaves are few in number, clasping, and near the top somewhat sheath-like; they are placed alternately.

The flower is small; the lip fan-shaped, 3-cleft, and fringed; the other petals erect and fringy; the slender spur is curving, and longer than the foot-stem; the calyx-parts are small and rounded, one being erect and the two others spreading at the sides. The texture is fine, and the color is a clear light lilac, the spur being purplish-green. The curious little foot-stem looks like a rolled leaf; it is green, or slightly tinted pink. The flowers are placed in a terminal spire, springing from the angles of small pale green leaves (bracts).

Green at first, the lilac flush overspreads the buds as they swell before the blossoms expand. It is an odorous flower, and fortunately not uncommon. The spur is more curving than that of the Large Purple Fringed, and the whole plant is more slender and less perfect in its details, yet it is sufficiently like its early sister to be taken for a belated specimen of the *fimbriata* when first espied amongst the tall grasses.

SMALL PURPLE FRINGED ORCHID: H. psycodes.

Habenaria Hookeri.

Found along swamps, or in woods, in June.

The angular, somewhat twisted, green flower-stem rises from between two leaves, to the height of 8 or 12 inches.

The large and rounding leaf is 3 or 4 inches broad, and not greatly longer; it has many parallel ribs marking it underneath, a thick and leathery texture, and a smooth, very glossy surface. The color is a strong dark green, the underside being covered with a pale bloom. The two leaves are opposite each other, lying upon the ground.

The flower is rather noticeable in shape, for the lip is wide at the base, with a pointed and much curving tip; the upright petals are very sharp-pointed (like a scimetar), and their needle-like tips cross each other; the spur is a trifle longer than the foot-stem, and very slender; the broad upright part of the calyx behind the upper petals curves forward over them, and nearly meets the upward curve of the lip (thus increasing a resemblance to a pair of nippers); the side calyx-parts are oblong, with fine tips, which turn back. In color all parts of the flower are green, the lip tending somewhat toward yellow. The flowers are set, on twisted foot-stems, alternately, and a certain space apart, in a spike; they each spring from the angle of a sharp-pointed little leaf (or bract) which is longer than the foot-stems.

One of the most interesting features of this Orchid is the peculiar varnished appearance of the underside of the foot-leaf.

—— H. Hookeri.

Fringed Green Orchid. *Habenaria lacera.*

Ragged Orchis.

Found, during July and August, on moist banks, and beside running water.

The round smooth stalk grows to be 8 or 12 inches high: it is nearly white at the foot, gaining to a dull, but pale, green near the flowers.

The few leaves are lance-shaped, large near the ground and lessening to a mere sheath above, of a tough texture, and smooth surface. They are alternately placed, and clasp the stalk with a marked fold on the midrib. The color is a faded yellow-green.

The lip of the small flower is fan-shaped, with a very narrow base, 3-cleft, and spreading; the other petals are erect and fringy; the spur is long and curved; the calyx is small, the side-parts flaring, the third part erect behind the petals; it is colored a pale yellow-green. The foot-stem is slightly twisted, as long as the spur, and pale. The blossoms are placed alternately, rising from the angles of small enfolding leaves (bracts), in a scattering terminal spike.

There is a monotony of hue about this plant, and a general dinginess of aspect, that render it rather uninteresting; the lip more nearly approaches clarity of tone than any other part of the flower.

FRINGED GREEN ORCHID: H. lacera.

Habenaria hyperborea.

Found in cold dark bogs, and deep woods, in July and August.

The rigidly erect stalk, in height 10 to 18 inches, is round and smooth at the foot, but becomes angular or grooved, and twisted, above; pale green in color.

The lower leaves are oblong, and round-pointed, the upper leaves longer and sharp-pointed; they are folded on the midrib, and leathery in texture; in color dark green, the underside pale, shining, and moist. They are placed alternately, and clasp the stalk like a sheath. Three or 4 large leaves occur at the foot; the change to the pointed shape is very abrupt.

The flower is small; the lip is sharp-pointed and flaring, the other petals smaller and narrow, their tips overlapping, under the erect calyx-part, while the two side calyx-parts curve downwards; the spur is blunt, short, and curved. The seed-box is very noticeable, shaped like a large 5-angled bag, with a very small neck, from which the blossom spreads. All parts of the flowers are tinted alike, a dull green. They are set tight to the stalk each in the clasp of a small sharp-tipped pale-green leafy bract, in a close club-shaped spike.

The stamens just show their brown tips under the hooded petals, thus increasing the fantastic likeness to a little old woman which is given to the flower by its big seed-box. Reports from Iceland and Greenland show that this Orchid ventures far into the arctic regions.

—— H. hyperborea.

Rattlesnake Plantain. *Goodyera pubescens.*

Found in rich woods, usually near evergreens, and blossoming in July and August.

This leaf is oval, with a short, wide foot-stem; its entire margin is ruffled a little, it is thick, silky-soft to the touch, and of a gray-green color finely netted with whitey-green markings. The leaves are set in a cluster, close to the ground.

The small greenish-white flower has a lip like a short pouch, with a sharp, narrow tip, the outer parts being folded loosely about it; it is waxen in texture, and placed on the top of the green, downy seed-box. The flowers are set closely in a spike, whose stem rises from the middle of the leaf-tuft to the height of 6 or more inches.

The foliage of this Orchid is more striking than its flower, and usually lasts very late into the fall.

RATTLESNAKE PLANTAIN : Goodyera pubescens.

Lady's Tresses. *Spiranthes Romanzoffiana.*

Found during July and August beside meadow runnels, and on moist banks.

The round little flower-stem is twisted and smooth ; about 8 or 10 inches high ; and of a pale green color, pink at the foot.

The long narrow leaf, with its sharp-pointed tip, is not large, and contracts to a mere sheath near the flower ; its texture is thick, and surface smooth ; it clasps the stem. The arrangement is alternate, and the color is a dull, but pale, green.

The small flower is indeterminate in shape, with an oblong down-bent lip, all the other parts being erect and holding their tips together ; the throat is round and hollow ; the texture is waxen and the color white, or sometimes tinged with faint dull yellow. The flowers, set down in the hold of enfolding, green sheath-like bracts whose pointed tips curve over the blossoms, are arranged in rows to form a close spike.

The twisting of the flower-stem causes the ranks of blossoms to appear to be placed in a spiral arrangement. The flowers have a cloying perfume.

LADY'S TRESSES: Spiranthes Romanzoffiana.

Lady's Tresses. *Spiranthes præcox.*

Found in moist meadows and waysides during September and October.

The erect stalk varies in height from 4 to 12 inches; it is round and smooth; light green or pale in color.

The long slender root-leaves (one or two), which rise from the ground, are tapering at the base, firm and thick of fibre, and smooth to the touch; the color is yellowish-green. A few sheathing little leaves occur along the stalk.

The small flower is very like *S. Romanzoffiana*, with a curving lip, and crinkled margins; in color it is pearly white. It is enfolded in an oval, small, green leafy bract. The flowers are oddly arranged, in a single much twisted row, forming a spiral spike.

The blossoms are sweet scented.

LADY'S TRESSES : S. præcox.

IRIS FAMILY.

IRIDACEÆ.

Wild Iris. *Iris versicolor.*

Larger Blue Flag.

Found by runlets and in moist meadows, in June.

The rootstock sends up several leaves ensheathing the flower-stem.

The leaf is sword-shaped, long, narrow, and pointed, with a narrow, light, ribbon-like finish to its edge; the inconspicuous ribs are grass-like. Its color is a cool, light green, with traces of dull violet near the foot. Several leaves overlap one another at the base.

The flower is large, with 9 petal-like parts, growing in sets of threes; the 3 outer parts are broad, spreading, and curving downwards more or less,—in color violet, marked with white and yellow, and delicately lined with dark violet; the 3 parts that alternate with these are smaller, erect, and taper to a narrow foot at the base,—in color they are violet; the pistil is in 3 petal-like parts, which curve back, over the broad outer divisions, with a fine arch (under which the stamens may be found),—they are cleft at the tips, and in color are violet, darker at the tips, and reddish on the arch. The texture of the flower is exceedingly fine and delicate. It grows from the summit of the 3-angled green seed-case, which is borne on a tall, leafy, green stem; this stem is slightly flattened on opposite sides, and is smooth and polished of surface.

The ancients, who named this flower Iris, had a true appreciation of its rainbow-like qualities; its texture is so ethereal that it seems to float in the grass, and to fade before our eyes like its evanescent namesake. It however replaces one day's bloom by another flowering, and keeps up a prolonged succession of blossoms from day to day.

"The fleur-de-lys, which is the flower of chivalry, has a sword for its leaf, and a lily for its heart."—Ruskin.

WILD IRIS: Iris versicolor.

Blue-eyed Grass. *Sisyrinchium angustifolium.*

Blue-eyed Mary.

Found, during June and July, in moist meadows and pastures amidst grasses.

A few leaves and the flower-stem, from 4 to 8 inches in height, rise from the root.

The leaf is like a grass-blade, fine-pointed, flat, and very thin, especially along the margins; it is slightly ridged with veins, and is smooth. In color, a strong green with a hint of blue.

The 6 petal-like parts of the flower are oblong and blunt-pointed, with an abrupt sharp tip; their texture is thin, and they spread widely. The coloring is charming, a pale or dark blue, with purple markings, and a central design in yellow daintily outlined in purple; the prominent pistil is yellow at the base, and purple above, while its 3-cleft tip is orange. Two or three flowers are closely grouped on a little foot-stem which rises from betwixt two sheath-like leaves set on the summit of the rigidly upright flower-stem. This stem is furnished with thin sword-like margins.

Though not found in abundance generally, this is not an uncommon plant, and occasionally a meadow may be found which every June morning is turned to a sea of blue, like a flax field for fullness of coloring, and every succeeding afternoon becomes green again, because this little Iris shuts her blue eye by mid-day. But one flower blooms on a plant at a time.

BLUE-EYED GRASS : Sisyrinchium angustifolium.

AMARYLLIS FAMILY.

AMARYLLIDACEÆ.

Star Grass. *Hypoxis erecta.*

Found in grassy pastures and fields from May to the end of June.

The leaves and flower-stems, from 6 to 8 inches in height, rise together from the ground.

The long, narrow leaf is slightly grooved, with a marked midrib, and a strong fibre ; in color, as well as shape, it resembles the grass it grows amidst.

The 6 petal-like, pointed parts of the flower are smooth on the inside and downy without ; they spread flat to show the 6 yellow stamens ; the inside of the flower is bright yellow, the outside tinged with green. Three or four flowers grow on the summit of the slender shining green stem.

The swing of the curving leaf-blades is admirably graceful.

STAR GRASS: Hypoxis erecta.

LILY FAMILY.

LILIACEÆ.

Adder's-tongue. *Erythronium Americanum.*

Dog-tooth Violet.

Trout Lily.

Found in early May on springy slopes or in moist meadow-lands.

Two leaves and the single flower-stem, which is about 6 or 8 inches in height, rise from the root.

The leaves are long and oval, tapering at the tip, with an entire margin, of a thick and juicy texture, and a smooth surface that is cool to the touch. The color is green with a bloom upon it, and mottled and streaked with dull red, which appears very strongly in the midrib and near the base of the leaf.

The flower is nodding and lily like in its general character; formed of 6 long taper-pointed petal-like calyx-parts. A ridge runs down the middle of each of the 3 inner parts. The flower is yellow; dark reddish on the outside of the outer divisions, and spotted with minute reddish dots on the inside of the inner divisions. The 6 stamens are large and yellow, and the pale greenish-yellow pistil is club-shaped, with 3 grooves. The flower-stem is round, smooth, and pale; it grows from between the two leaves.

In the sun the flower opens wide, its three outer divisions rolling back, and exhales a fragrant smell like that of new lilac shoots; the markings on the leaves are richer in color when the plant grows in more shaded places. It is a communistic plant, and exceeding capricious in withholding its bloom when transplanted.

ADDER'S-TONGUE : Erythronium Americanum.

Red Trillium. *Trillium erectum.*

Purple Trillium.

Red Benjamin.

Bumble-bee-root.

Squaw-root.

Wake Robin.

Found in the shade of damp woods, in May.

The simple stalk, varying from 6 to 12 inches in height, bears a whorl of leaves on its summit (from which springs the flower); it is large, round, juicy and smooth, and a deep or purplish-red color at the foot, but light green near the top.

The large and handsome leaf is a diamond shape, of about equal width and length, pointed at both ends: its ribs and veins form a stout and important framework, the margin is entire, texture loose, and the surface is shining underneath though not above; the color is a full green, tinged with pink at the base. Three leaves are set in a whorl.

The flower also is rather large; its 3 long oval petals are thin and close in texture, and colored a rich deep maroon-red, the underside inclining to purple, with parallel veins marked with a darker color. The calyx is 3-parted, the divisions shorter and more pointed than the petals; of a green color, edged and veined with red. The petals and calyx-parts spread alternately around the base of the prominent, 3-parted, conical, dark crimson pistil, and the 6 erect stamens, with their pale yellow or white tips. The single flower, on a square or round stem, springs from the whorl of leaves.

Though not strong in odor, its quality is rather rank. The flower-stem usually inclines to one side. When the plant first rises from the ground the leaves are close folded about the sharply-conical flower bud. White or greenish flowers are sometimes found instead of deep red.

RED TRILLIUM : Trillium erectum.

Nodding Trillium. *Trillium cernuum.*

Wake Robin.

White Benjamin.

Found in moist woods and on shaded banks in May.

The single, rather large and smooth stalk grows from 8 to 14 or 15 inches in height. It is light green, or reddish near the foot.

The leaf is large, a broad diamond-shape with long-pointed tip; it has 3 strong ribs, a fine texture, and smooth surface; and it grows in a whorl of 3 upon the summit of the stalk. The color is a full, juicy green.

The flower is rather large; the 3 petals are tapering, recurved, and white; the alternating calyx-parts are light green; the 6 stamens are dull lavender,—the pistil 3-parted. The single flower, on its short stem, hangs under the leaves, which almost conceal it.

NODDING TRILLIUM: T. cernuum.

Bellwort. *Uvularia perfoliata.*

Wild Oat.

Straw Bell.

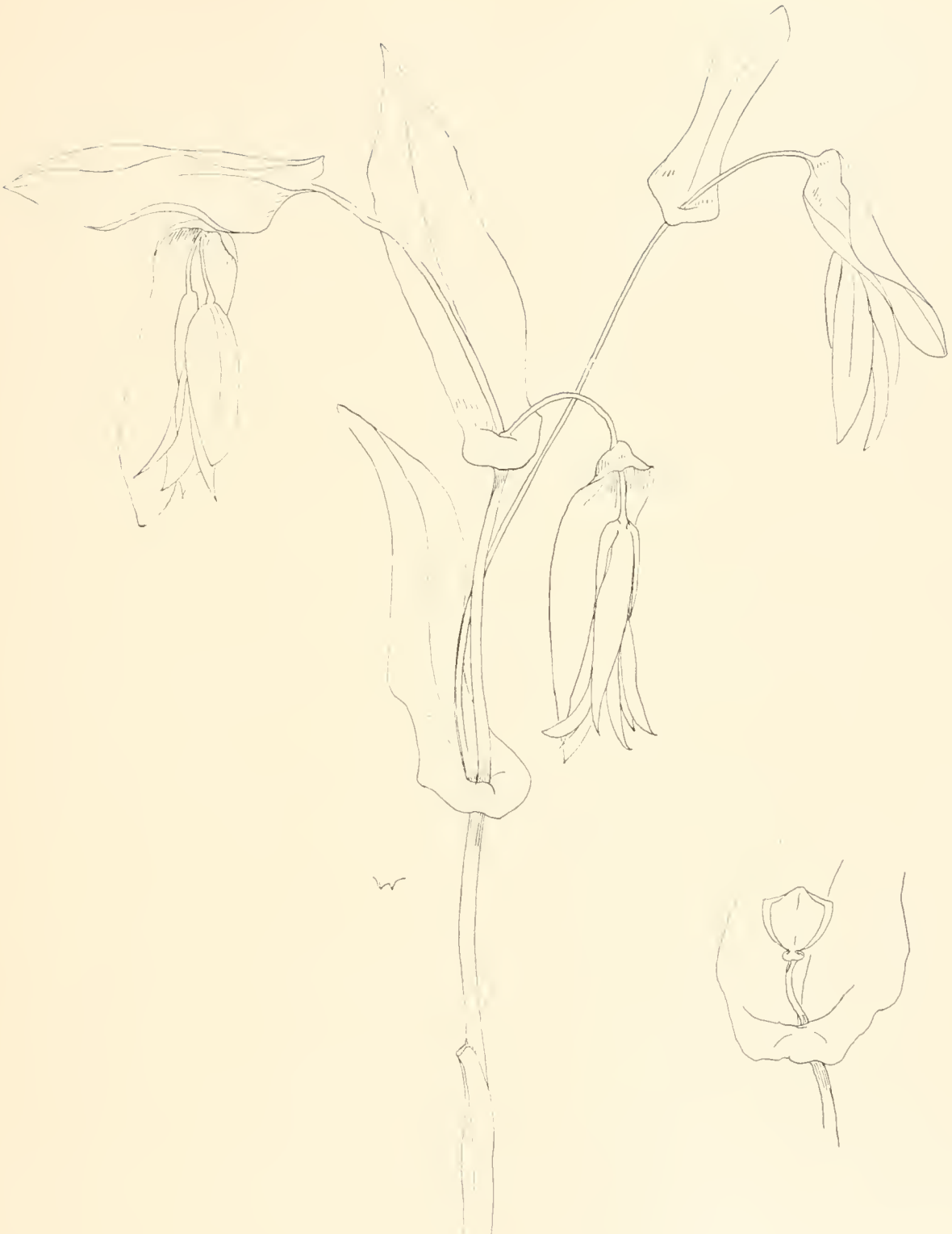
Found in damp woods, during May.

The slender stalk forks at the top into 2 (or sometimes more) branches; it reaches the height of 10 or 15 inches, is hard and round, grooved a little, and shining. The color is a cool light green, tinted with purple-brown at the foot. Two or three sheath-like leaves enfold it near the foot.

The oblong leaf grows together about the stalk, with an appearance of being strung upon it; it is deeply creased upon the midrib, the margin is entire, and its texture is firm and thin, most pleasant to the touch. The color is a cool fine green, underneath pale with bloom. The leaves are alternate, and occur only upon the branches.

The flower is shaped like a slender deep bell, whose pointed tips slightly curve outwards but never spread wide apart; its 6 calyx-parts are petal-like, long and narrow, each grooved down the middle: the texture is thin and fine, and smooth on the outside, while the inner surface is rough as though spread with fine meal of a slightly richer hue than the pale straw-yellow bell with its faint tinge of green. The flower hangs singly on a short, slender, terminal green stem.

After the fall of the flower the stems prolong themselves with a further succession of leaves; thus the rather conspicuous seed-pod is left hanging near the middle of the branch.



BELLWORT : Uvularia perfoliata.

Wild Oat. *Oakesia sessilifolia.*

Found in May, in moist shade; in frequent neighborhood with the Bellwort.

The stalk, from 6 to 8 inches high, is very like its cousin Bellwort, but is more slender and bears a leaf beneath the fork of its branches; it is also greener in hue.

The oval, or long-pointed, entire, leaf is smooth above, and ridgy beneath. Of a beautiful light green color. The leaves are arranged in pairs at the flower, and alternately; they are half-clasping, and hang lightly.

The flower is smaller than the Bellwort blossom, and the 3-parted pale yellow pistil protrudes conspicuously. The color is pale straw-yellow. The bell hangs on a slender stem that springs from beneath a leaf, on the underside of the branch.

Seldom more than one of these shy bells is found hiding under a branch. Possibly the tips curve outward more than those of the Bellwort's flower.

WILD OAT : Oakesia sessilifolia.

Two-leaved Solomon's Seal. *Smilacina trifolia.*

False little Solomon's Seal.

Two-leaved Smilax.

Found in the woods during May.

The stalk, which grows from 3 to 6 inches in height, is round, and grooved, and usually bears 2 leaves. Its color is pale green, sometimes tinged with dull red.

The oval leaf is heart-shaped at the base where it partly clasps the stalk; the margin is entire, and the ribs are parallel, the texture is fine, and the surface is smooth and shining. In color, a light yellowish-green. Two or three leaves occur on the plant, alternately placed.

The flower is quite small, and white, with 4 petal-like parts, 4 stamens, and 1 pistil. The flowers are fragrant, and very numerous, clustered in a short, close terminal spike.

In common with others of the small Smilaxes the strong-fibred stem has a somewhat zigzag gesture. It looks an honest little plant, not at all deserving the opprobrious epithet, "false," that has been given it.

TWO-LEAVED SOLOMON'S SEAL : Smilacina trifolia.

Solomon Zigzag. *Smilacina racemosa.*

False Spikenard.

Found in June, in moist woods and brookside copses.

The leafy stalk (from 1 to 2 feet high) is oblique and zigzag in gesture; it has a strong fibre, and a smooth surface, and is light green.

The leaf is oval—long in proportion to its width,—tapering to a slender tip, with an entire and much ruffled margin, and 3 noticeable ribs; the surface is finely downy; the color a strong, vigorous green. The leaves have almost no stem at all, and are placed alternately along the stalk.

The flower is small, with 6 petal-like parts and 6 stamens, all greenish white. Many flowers are gathered in a branching cluster upon the end of the leafy curving stalk.

The berries are pale red, speckled with dark. Gray's *Manual* in speaking of this genus says its name is a diminution of *Smilax*, "to which, however, these plants bear little resemblance." For a similar reason, perhaps, this plant is called "false" after the true Spikenard!

SOLOMON ZIGZAG : S. racemosa.

Carrion Flower. *Smilax herbacea.*

Found in moist meadows, along river banks, and in wayside thickets in June.

The round, smooth, tough, green stalk grows upward at first, but soon swings over to one side with a strong curve, leaning on surrounding plants for support, and further assisting its progress by means of many small twining tendrils.

The large leaf is nearly round, and somewhat heart-shaped at the base; it has an entire edge, and strongly marked parallel ribs; though thin, it is tough, and has a smooth, shining surface, and a bright green color. The leaves are alternate at short intervals, almost crowded. The tendrils spring from the angles of the leaves.

The small flower has its parts in threes, with twice three stamens; it is dull light green in color. Very many flowers, some 20 to 40, on short flower-stems, are gathered together in a round head; this head is on the end of a stem from 4 to 6 or more inches long. The flowers exhale a disagreeable odor which gives rise to its folk-name.

The fruit is a round blue-black berry; as it has not the objectionable odor of the flower, the vine becomes more attractive in its fruiting than in its blossoming season.

CARRION FLOWER: Smilax herbacea.

False Hellebore. *Veratrum viride.*

Indian Poke.

Poor Annie.

Found blossoming in June, in wet hollows, and along the borders of upland streams.

Its simple, erect stalk, growing from 2 to 4 feet high, is very leafy: it is round, and stout, an inch or more in diameter at the base: smooth, and green.

The very large leaf, from 10 to 12 inches long, is broadly oval, tapering at the tip, and deeply pleated on its many parallel ribs: the surface is finely downy, especially beneath; in color a bright grass green.

The flower is about three fourths of an inch across; the 6 spreading petal-like parts are leaf-like in texture, and of a yellowish-green color. The flowers, growing on very short foot-stems, with a narrow leaf (or bract) to each one, are thickly set in a pyramidal cluster, on the top of the leafy stalk.

The juice, particularly that of the root, is said to be a strong acrid poison. It is a plant of splendid vigor, and curves; in early spring, before the twiggery shows any green, it pushes up from the dark earth a large, lush, green bud, charged to the full with the impulse of growth: later its leafage becomes more or less mingled with that of its neighbors, and so does not receive the recognition it deserves for its striking qualities.

FALSE HELLEBORE: Veratum viride—$\frac{1}{3}$ life size.

Indian Cucumber-root. *Medeola Virginiana.*

Found in moist rich woods, during June.

The slender, smooth, green stalk varies from 1 to 3 feet in height; a light fleecy wool is loosely caught around it.

The oblong leaf tapers at both ends, it is 3-ribbed, and the margin is entire; its color is a fresh full green. The leaves clasp the stalk, and are set in two whorls, of 3 to 9 in number.

The flower is inconspicuous on account of its light greenish color; its 3 petals and 3 calyx-parts are long, narrow, and much recurved; the 6 stamens are colored a dark crimson-red, with brown tips, and the 3 divisions of the pistil are long and spreading. Three or four blossoms on their slender stems hang beneath the upper whorl of leaves.

The green, spidery flower of the Medeola is curious rather than pretty,—the charm of the plant lies in the slender stalk, with its two whorls of fine green leaves lightly poised about it. When the dark blue-black berry is ripe its stem takes on an upward curve, and at about the same time a crimson-red spot appears at the base of the leaves.

INDIAN CUCUMBER-ROOT : Medeola Virginiana.

Great Solomon's Seal. *Polygonatum giganteum.*

Giant Solomon's Seal.

Found on rich banks, in partial shade, during June.

The single leafy stalk grows from 3 to 8 feet high; at first it stands erect, but later the tip curves over and downward: it is tough-fibred, smooth and fine in surface, and green.

The large broadly oval leaf is sometimes 6 inches long and 3 broad; it is pointed at the tip, and partly clasps the stalk at its base; the margin is entire, the ribs parallel and deeply marked, and the texture is fine, while the surface is smooth. In color it is a cool dark green. The leaves occur alternately along the stalk.

The tubular flower is from $\frac{1}{2}$ an inch to about $\frac{3}{4}$ of an inch long, and spreads into 6 divisions. The color is pale green, the tips of the 6 stamens which first show in the opening of the flower are pale straw-color. The flowers swing on slender stems, from the angles of the leaves, in clusters of two or three (or sometimes singly,) forming a row upon the curving stalk.

Following the flower-bells come the globular blue-black berries, about the size of a pea; they are fully as charming as the blossoms, but seldom remain long on the stalk, since they are fully appreciated by the birds who devour them quickly. This is a plant of fine gesture, and splendid curves, too large to be figured full-size upon the accompanying plate.

GREAT SOLOMON'S SEAL : Polygonatum giganteum.

Nodding Lily. *Lilium Canadense.*

Field Lily.

Found in grass fields, and moist meadows, during July.

The single, leafy, and smooth stalk is 2 or 3, or more, feet high. In color it is green, often inclined to take on a dull reddish-brown hue near the flowers.

The leaf is long, pointed at the tip, and clasping the stalk at the base ; it is of strong fibre ; in color a vigorous green. The leaves are inclined to grow in whorls about the stalk, but are often placed irregularly near the top.

The large and spreading, bell-shaped flower is formed of 6 petal-like parts, whose tips are pointed, and curved a trifle,—3 of the parts have prominent ribs down the middle ; it is orange-yellow in color, on the inside speckled with many small reddish-brown dots. The 6 stamens and the club-shaped pistil have dull tawny-orange or reddish-brown tips. From 1 to 3, or more, flowers swing nodding on their short stems from the top of the stalk.

When the orange bells of the Field Lily may be seen gaily nodding here and there just above the feathers of the red-top grass in level meadows, midsummer has come in.

NODDING LILY : Lilium Canadense.

Flame Lily. *Lilium Philadelphicum.*

Wood Lily.

Found in upland meadows, woods, and along copse-borders in July.

The stalk grows from 1 to 2 feet high; it is single, leafy, and strong-fibred and smooth; in color a purplish-green.

The leaf is long, narrow, and pointed, of a firm strong texture, and smooth surface. The color is a full-toned green. The leaves are placed upon the stalk, in whorls of 5 or more, with an occasional one, escaping regularity, lodged between.

The 6 petal-like parts of the large flower-bell are narrowed at their bases into little stems; 3 of the parts have pronounced midribs. The color of this Lily is orange-red, or flame, irregularly marked on the inside with large spots of reddish brown; the 6 stamens, and the pistil, have reddish-brown tips. Usually a single flower, but sometimes two, on slender stems, are erect upon the top of the stalk.

While the general direction of the stalk is upright the flower sways from side to side with a free grace of movement. Sometimes a single plant will stray into some little open clearing of a lonely wood where its flame warms the whole space; or again its bell swings out from the rocky slope of a mountain pasture. Near the seaboard it grows in communities, where its color, intensified by the sea air, gives it the folk-name of "Flame Lily." The plant is said to be especially indifferent to drought.

FLAME LILY: L. Philadelphicum.

PICKEREL-WEED FAMILY.

PONTEDERIACEÆ.

Pickerel-weed. *Pontederia cordata.*

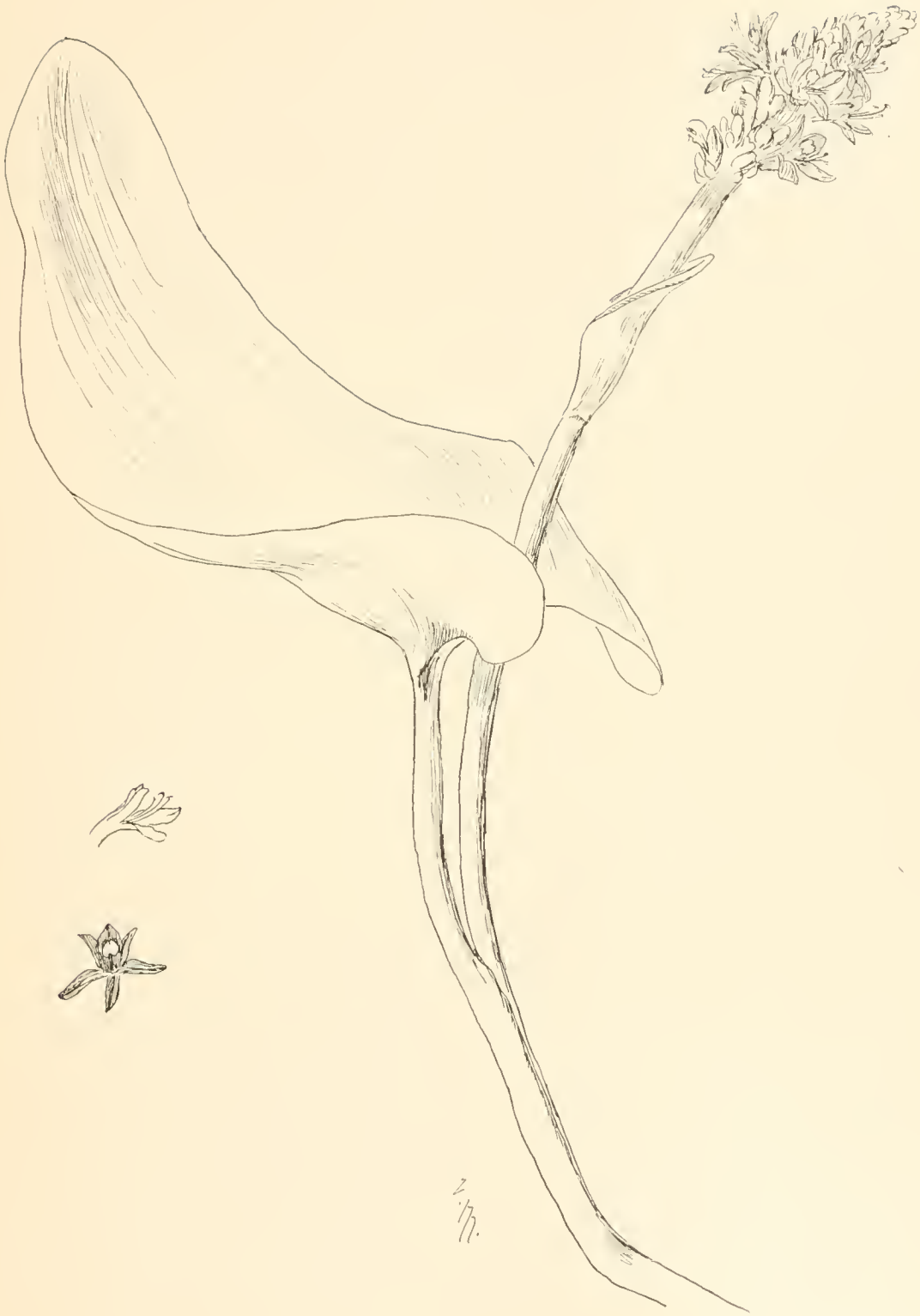
Found in shallow water from July to September.

The height is variable, from 4 to 6 inches or more. The stalk is stout, round, smooth, and green; it grows with sharp-angled turns below the water.

The leaf is large and arrow-shaped, with a blunt tip; the margin is entire, the fibre tough and leathery, the surface extremely smooth, and the color a dark strong green. The stem is round, large, and sheathes the stalk.

The irregularly 4-parted flower has a short tube; the upper division is erect, broad, and 3-lobed; the 3 lower divisions are long, narrow, and spreading; it has 6 stamens. In color it is a dull bluish violet, the broad division marked with two round greenish-yellow spots. The flowers grow in a thick blunt spike, and bloom spirally; the stem is enfolded about midway by a small sheathing, green leaf.

The flowers are fleeting with the day. In general lines the Pickerel-weed is full of vigor, and strong swinging curves, but there is a primitive lack of finish in its growth.



PICKEREL-WEED : Pontederia cordata.

CAT-TAIL FAMILY.

TYPHACEÆ.

Bur-reed. *Sparganium simplex.*

Found along the borders of ponds, blossoming in June, July and August.

The erect, simple, stalk is round, smooth, strong, and fine in fibre; of a bright yellow-green.

The leaf is a long, narrow, green ribbon, pointed at the tip, and growing thick toward the base where it sheathes the stalk; it has a smooth surface, and exceedingly fine texture; of a beautiful grass-green color.

The small flowers are of 2 kinds in densely crowded, round heads which are threaded on a long curving flower-stem; the lower ones are the seed-bearing heads, and develop into green burs about 1 inch in diameter, the upper, stamen-bearing ones, are light and fluffy with many fine thread-like stamens, of a dull white color, tipped with gray.

One involuntarily says of this plant, How Japanese! Our Western neighbors have shown in their drawings that they appreciate the long sweeping curves and original gesture found in many water plants. The name of the genus means a fillet, and is derived from the ribbon-like leaf.

BUR-REED : Sparganium simplex.

ARUM FAMILY.

ARACEÆ.

Skunk Cabbage. *Symplocarpus fœtidus.*

Found in March or early April, in damp meadows, and moist or swampy woodlands.

The leaves and hooded flower-clusters rise from the ground.

The large and conspicuous leaves, which do not unfold until the flowering season is past, vary from 1 to 2 feet in length; they are oval in shape with a blunt tip and heart-shaped base, have entire margins, firm texture, and smooth surfaces, and resemble the garden Day-Lily because of their many parallel ribs. In color a light clear green.

The unnoticeable 4-parted greenish-yellow flowers are gathered closely on a fleshy round club (that is about an inch in diameter) and enveloped by a protecting hood. This hood is large and sharp-pointed, of a very thick and leathery texture, with a smooth and dull glossy surface; it is a dull brown or mahogany color, mottled or streaked with darker purple or red. From 1 to 3 or 4 of these hood-protected flower-heads are crowded close together, along with the rolled up leaf, in the hold of several dull greenish or slightly purple leaf-like parts which serve as weather blankets wrapped about the whole plant.

After the flowers mature the hood shrivels and falls away, the blankets disappear, and the pointed leaf-bud then unfolds, the leaves pushing forth with fine springing curves. The strong odor of the plant prevents close observation, and denies to it the praise its growth deserves. In habit it is highly gregarious, and favorable meadows are thickly sprinkled with these rich-hued hoods of our earliest spring flower.

SKUNK CABBAGE : Symplocarpus fœtidus.

Golden Club. *Orontium aquaticum.*

Found in ponds, or standing water, in early May.

The flower-spike and leaves lie upon the water, or hold themselves just above its surface, springing on long stems from the submerged root.

The oblong, narrow leaf is thick and juicy, with an entire margin, that is conspicuously folded together and joined at the base, and a smooth surface. In color it is a rich-toned green with a bloom above, the under surface being shining and pale and much colored by fine speckles of bronze. The leaf-stem is round, porous, smooth, and bronzy.

The small, flat, indefinite flowers are inset closely upon a round club, in a smooth, curiously patterned mosaic-work of a bright golden-yellow color. This club terminates a smooth porous stem, which becomes large and is flattened on one side beneath the flowers; it is streaked with bronze beneath the water, but clear white above its surface.

"I don't feel as if I should search for it!" said the farmer when he saw this plant for the first time.

GOLDEN CLUB : Orontium aquaticum.

Green Dragon. *Arisæma Dracontium.*

Dragon-root.

Found in moist shade, in May.

The root produces usually one leaf-stem, 1 to 2 feet high, which bears the blossom-stem.

The leaflets of the compound leaf are 5 to 13 in number, in shape oblong, tapering at both ends, and entire; the surface is smooth, and a rich dark green color. The stem is smooth, round, and light green.

The little flowers are borne on the base of a long wand, which projects one or two inches beyond the ensheathing wrapper,— both wand and envelope are green; the stem is round, smooth, and green, and grows from the side of the leaf-stem.

This well-named plant has many marks of the dragon upon it; its solitary leaf spreads, particularly when unfolding, a green claw-like hand above the flowers, and all about the club-shaped root-bulb grow numerous flesh-colored bulblets highly suggestive of his dragon-ship's toes!

GREEN DRAGON : Arisæma Dracontium.

Jack-in-the-Pulpit. *Arisæma triphyllum.*

Indian Turnip.

Found in damp shady nooks, blossoming in May.

The root sends up two or three leaf-bearing stems which vary from 8 to 20 inches in height.

The leaf is compound, and often grows to a considerable size; the 3 leaflets are a broad oval shape, tapering at the tip, the ribs much marked, the fibre fine, and surface smooth; a full, juicy green. The stem is long, round and smooth, and sheathed at the foot.

The inconspicuous flowers are borne at the base of a green wand, which is wrapped around by a leaf-like sheath, its tip curving over the head of Jack and making the sounding board of his airy green pulpit. This sheath is tougher in texture and more shining than the leaves, and varies in color; on the stamen-bearing plant it is green, striped with greenish-white, while that of the pistil-bearing plant is green, striped with blackish violet. The Jack-in-the-Pulpit is borne on a stout, round, shining stem, which springs from between the sheaths of the leaf-stem.

In late summer the ripened seeds are found, a thick short club of bright red berries; the leaves of the seed-bearing plants often grow very large and are a rich, dark green color. It will be observed that Jack-in-the-Pulpit is "brother to dragons"!

JACK-IN-THE-PULPIT : A. triphyllum.

Sweet Flag. *Acorus Calamus.*

Found in swamps and on the borders of runlets, in flower in June.

The Sweet Flag has no common stalk; the leaves springing directly from the rootstock; long and narrow (from 3 to 4 feet long), sword-like in shape, thin and even on the edge, and rising to a sharply defined ridge on one side of the center; the surface is like silk, and the texture is firm and fine; of a beautiful grass-green color.

The minute greenish-yellow flowers are closely set in a long club-like spike, growing out abruptly from the middle of a leaf-like stalk.

The large root is sought and eaten for its pungent and aromatic flavor; the tender young flower-club also has the same qualities of flavor and is eaten by children, who in certain localities call it "the grater."

SWEET FLAG : Acorus Calamus.

WATER-PLANTAIN FAMILY.

ALISMACEÆ.

Arrowhead. *Sagittaria variabilis.*

Found in shallow water and low moist grounds, from July to August.

The leaf- and flower-stems rise 1 or 2 feet from the root.

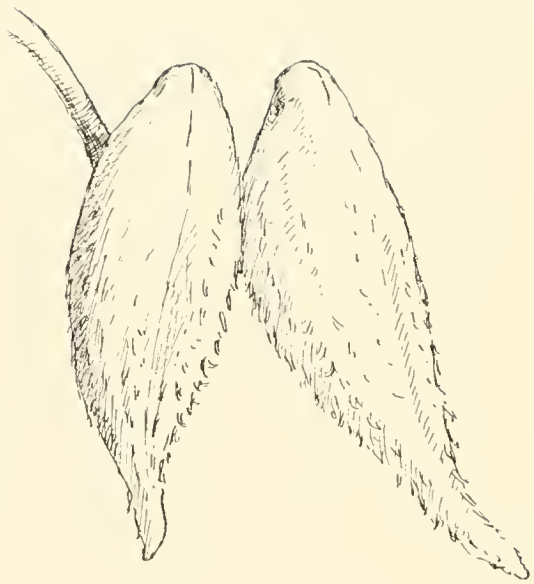
The leaf varies very much in size and proportion; it is arrow-shaped, with strong ribs, a smooth and fine surface, and is borne on a single stem that rises directly from the root. It is green, of a vigorous quality.

The flowers leave 3 rounding petals, concave, and of an exceptionally pure white color. They are of two kinds, sometimes borne on separate stems, sometimes upon the same stem (in which case the stamen-bearing flowers are placed upon its upper part); the stamens are many, and of a pure orange yellow, making a heart of gold in their white blossoms, while the pistil appears in its flower as a beautiful light green ball. The calyx is green and 3-parted. The flowers are arranged in whorls of threes and fours, upon inch long foot-stems, which are placed along a large many-angled, green stem, rising from the root.

The Arrowhead is attractive in all its parts, and in its gesture; it is truly decorative, and suggests the subjects treated by the best Gothic artists.

CENTRAL
CHILDREN'S

ARROWHEAD : Sagittaria variabilis.



Pods of Asclepias Cornuti.

INDEX.

SCIENTIFIC NAMES.

A

PAGE

Achillea Millefolium 306
Acorus calamus 608
Actæa spicata 18
Agrimonia Eupatoria 168
ALISMACEÆ 610
AMARYLLIDACEÆ 568
Ampelopsis quinquefolia 110
Amphicarpæa monoica 124
Anagallis arvensis 416
Anaphalis margaritacea 302
Andromeda, ligustrina 376
polifolia 374
Anemone, nemorosa 6
Virginiana 8
Anemonella thalictroides 14
Antennaria plantaginifolia . . . 246
Anthemis Cotula 258
Apios tuberosa 142
APOCYNACEÆ 418
Apocynum, androsæmifolium . . . 418
cannabinum 420
Aquilegia Canadensis 20
ARACEÆ 600
Aralia, nudicaulis 220
racemosa 222
ARALIACEÆ 220
Arctium, Lappa 298
Arisæma Dracontium 604
triphyllum 606
ARISTOLOCHIACEÆ 528
Artemisia Absinthium 274
Asarum Canadense 528
ASCLEPIADACEÆ 422
Asclepias, Cornuti 434
incarnata 426
obtusifolia 424
phytolaccoides . . . 430
purpurascens 428
quadrifolia 422
tuberosa 432
Aster, acuminatus 344
cordifolius 354
corymbosus 336
linariifolius 348
Aster, macrophyllus 346
multiflorus 340
Novæ Angliæ 338
patens 352
ptarmicoides 334
puniceus 342
undulatus 350

B

Baptisia tinctoria 120
Barbarea vulgaris 52
BERBERIDACEÆ 32
Berberis vulgaris 32
Bidens, cernua 312
frondosa 314
BORRAGINACEÆ 440
Brassica, nigra 56
Sinapistrum 54
Brunella vulgaris 502
Buda rubra 82

C

Calopogon pulchellus 546
Caltha palustris 4
Campanula, rapunculoides . . . 368
rotundifolia 366
CAMPANULACEÆ 364
CAPRIFOLIACEÆ 226
CARYOPHYLLACEÆ 76
Cassandra calyculata 372
Cassia Marilandica 122
Castilleia coccinea 456
Ceanothus Americanus 108
CELASTRACEÆ 106
Celastrus scandens 106
Cephalanthus occidentalis . . . 242
Cerastium arvense 76
Chelidonium majus 44
Chelone glabra 482
Chimaphila, maculata 400
umbellata 398
Chrysanthemum Leucanthemum . . 262
Cichorium Intybus 296
Circæa alpina 202

Index.

CISTACEÆ 60
Clematis, verticillaris 28
Virginiana 30
Cnicus, arvensis 290
lanceolatus 286
pumilus 288
COMPOSITÆ 246
CONVOLVULACEÆ 444
Convolvulus, sepium 446
spithamæus . . . 444
Coptis trifolia 16
CORNACEÆ 224
Cornus Canadensis 224
Corydalis glauca 48
CRASSULACEÆ 188
CRUCIFERÆ 50
CUCURBITACEÆ 204
Cuscuta Gronovii 448
Cypripedium, acaule 538
pubescens 540
spectabile 542

D

Daucus Carota 218
Dentaria laciniata 50
Desmodium nudiflorum 140
Dianthus Armeria 88
Dicentra Cucullaria 46
Diervilla trifida 232
Dirca palustris 532
Drosera rotundifolia . . . 190
DROSERACEÆ 190

E

Echium vulgare 442
Epigæa repens 370
Epilobium, angustifolium . . . 198
coloratum 200
Epiphegus Virginiana 484
ERICACEÆ 370
Erigeron, bellidifolius 252
Philadelphicus . . . 254
Erythronium Americanum . . . 570
Eupatorium, ageratoides . . . 282
perfoliatum . . . 280
purpureum 284

F

Fragaria Virginiana 146
FUMARIACEÆ 46

G

Galeopsis Tetrahit 514
Galium asprellum 244
Gaultheria procumbens 402
Gentiana, Andrewsii 438
crinita 436
GENTIANACEÆ 436
GERANIACEÆ 96
Geranium, maculatum 96
Robertianum 98
Gerardia, flava 468
pedicularia 470
tenuifolia 472
Geum album 166
Gnaphalium polycephalum . . . 304
Goodyera pubescens 558

H

Habenaria, fimbriata 548
Hookeri 552
hyperborea 556
lacera 554
psycodes 550
HAMAMELIDEÆ 192
Hamamelis Virginiana 192
Hedeoma pulegioides 512
Helianthemum Canadense . . . 60
Helianthus tuberosus 316
Hepatica triloba 1
Heracleum lanatum 212
Hieracium, aurantiacum 268
Canadense 266
Gronovii 270
venosum 264
Houstonia cærulea 238
Hydrocotyle Americana 214
HYPERICACEÆ 90
Hypericum maculatum 92
perforatum 90
Hypoxis erecta 568
Hyssopus officinalis 500

I

Ilex verticillata 104
ILICINEÆ 104
Impatiens fulva 102
Inula Helenium 300
IRIDACEÆ 564
Iris versicolor 564

K

Kalmia, angustifolia 390
glauca 388
latifolia 386
Krigia Virginica 260

Scientific Names.

L

LABIATÆ 492
Lactuca hirsuta 272
LAURACEÆ 530
LEGUMINOSÆ 116
Leonurus Cardiaca 504
Lepidium Virginicum 58
LILIACEÆ 570
Lilium, Canadense 592
Philadelphicum 594
Linaria, Canadensis 476
vulgaris 474
Lindera Benzoin 530
Linnæa borealis 230
Lobelia, cardinalis 362
inflata 360
Kalmii 358
spicata 356
LOBELIACEÆ 356
Lonicera glauca 226
Lupinus perennis 116
Lysimachia, quadrifolia 410
stricta 412

M

Malva rotundifolia 94
MALVACEÆ 94
Medeola Virginiana 588
Medicago, lupulina 136
sativa 138
Melampyrum Americanum . . . 478
Mentha, Canadensis 506
piperita 510
virides 508
Mimulus ringens 480
Mitchella repens 240
Mitella diphylla 180
Monarda, didyma 496
fistulosa 498
Moneses grandiflora 396
Monotropa, Hypopitys 404
uniflora 406
Myosotis palustris 440
Myrica asplenifolia 534
MYRICACEÆ 534

N

Nepeta, Cataria 494
Glechoma 492
Nuphar advena 36
Nymphæa odorata 38
NYMPHÆACEÆ 36

O

Oakesia sessilifolia 578
Œnothera, biennis 196
pumila 194
ONAGRACEÆ 194
ORCHIDACEÆ 536
Orchis spectabilis 536
OROBANCHACEÆ 484
Orontium aquaticum 602
Osmorrhiza longistylis 206
Oxalis corniculata 100

P

PAPAVERACEÆ 42
Parnassia Caroliniana 186
Pastinaca sativa 216
Pedicularis, Canadensis 452
lanceolata 454
Phryma Leptostachya 490
Phytolacca decandra 518
PHYTOLACCACEÆ 518
Podophyllum peltatum 34
Pogonia ophioglossoides 544
Polygala, paucifolia 112
sanguinea 114
POLYGALACEÆ 112
POLYGONACEÆ 520
Polygonatum giganteum 590
Polygonum, amphibium 526
Pennsylvanicum . . . 524
sagittatum 522
Pontederia cordata 596
PONTEDERIACEÆ 596
Potentilla, argentea 174
arguta 172
Canadensis 170
fruticosa 176
Prenanthes, alba 308
altissima 310
PRIMULACEÆ 408
Pyrola, elliptica 392
secunda 394
Pyrus arbutifolia 144

R

RANUNCULACEÆ 1
Ranunculus, acris 24
Pennsylvanicus . . . 26
septentrionalis . . . 22
RHAMNACEÆ 108
Rhododendron, nudiflorum . . . 378
viscosum 380

Index.

Ribes floridum 184
Rosa, blanda 152
humilis 150
rubiginosa 148
ROSACEÆ 144
RUBIACEÆ 238
Rubus, Canadensis 156
hispidus 158
odoratus 160
villosus 154
Rudbeckia hirta 278
Rumex Acetosella 520

S

Sagittaria variabilis 610
Sambucus Canadensis 234
Sanguinaria Canadensis 42
Sanicula Marylandica 210
Saponaria officinalis 84
Sarracenia purpurea 40
SARRACENIACEÆ 40
Saxifraga Virginiensis 178
SAXIFRAGACEÆ 178
SCROPHULARIACEÆ 452
Sedum Telephium 188
Senecio aureus 256
Sicyos angulatus 204
Silene noctiflora 86
Sisyrinchium angustifolium . . . 566
Smilacina, racemosa 582
trifolia 580
Smilax herbacea 584
SOLANACEÆ 450
Solanum Dulcamara 450
Solidago, bicolor 320
cæsia 332
Canadensis 324
juncea 322
lanceolata 318
latifolia 330
nemoralis 328
speciosa 326
Sonchus, asper 292
oleraceus 294
Sparganium simplex 598
Specularia perfoliata 364
Spiræa, salicifolia 162
tomentosa 164
Spiranthes, præcox 562
Romanzoffiana 560
Steironema ciliatum 414
Stellaria, longifolia 80
media 78
Symphoricarpos racemosus . . . 236
Symplocarpus fœtidus 600

T

Tanacetum vulgare 276
Taraxacum officinale 248
Thalictrum, dioicum 10
polygamum 12
THYMELÆACEÆ 532
Tiarella cordifolia 182
Tricostema dichotomum 516
Trientalis Americana 408
Trifolium, agrarium 132
arvense 134
hybridum 128
pratense 130
repens 126
Trillium, cernuum 574
erectum 572
Tussilago Farfara 250
TYPHACEÆ 598

U

UMBELLIFERÆ 206
Uvularia perfoliata 576

V

Vaccinium, stamineum 384
vacillans 382
Veratrum viride 586
Verbascum, Blattaria 466
Thapsus 464
Verbena, hastata 486
urticæfolia 488
VERBENACEÆ 486
Veronica, Americana 460
officinalis 462
serpyllifolia 458
Viburnum acerifolium 228
Vicia Cracca 118
Viola, blanda 62
Canadensis 68
canina 70
palmata 72
pedata 74
pubescens 66
sagittata 64
VIOLACEÆ 62
VITACEÆ 110

Z

Zizia aurea 208

INDEX.

COMMON NAMES.

A

Aaron's-rod 188
Adder's-tongue 570
Agrimony, Common 168
Alder, Black 104
Alfalfa 138
Allspice, Wild 530
Alsike 128
AMARYLLIS 568
American Ivy 110
Andromeda, Marsh 374
Privet 376
Anemone, Rue 14
Star 408
Tall 8
Wood 6
Arbutus, Trailing 370
Arrowhead 610
ARUM 600
Aster, Branching 354
Broad-leaved 346
Early Purple 342
Later Purple 352
New England 338
Pine 348
Pointed-leaved 344
Starry White 340
Upland White 334
Variable-leaved 350
White Wood 336
Azalea, Pink 378
White 380

B

Balsam 102
Baneberry, Red 18
BARBERRY 32
Barberry 32
Bean, Wild 142
Bedstraw, Small 244
Bee Balm 496
Beech-drops 484
False 404
Beefsteak Plant 452
Bellflower 368
Bellwort 576
Benjamin-bush 530
Bergamot, Wild 498
Betony, Paul's 458
Wood 454
Birds' Pepper 58
BIRTHWORT 528
Bishop's Cap 180
Bitter-Sweet 106
Blackberry, High-bush 154
Running 156
Running Swamp 158
Black-eyed Susan 278
Bloodroot 42
Blueberry, Low 382
Blue Curls 516
Blue-eyed Grass 566
Blue-eyed Mary 566
Blue Sailors 296
Blue Weed 442
Bluets 238
Boneset 280
BORAGE 440
Bouncing Bet 84
Box-berry 240
Brooklime, American 460
BROOM-RAPE 484
BUCKTHORN 108
BUCKWHEAT 520
Bull's Eye 262
Bumble-bee root 572
Bunch-berry 224
Burdock 298
Bur-reed 598
Butter-and-Eggs 474
Buttercups 24
Butterfly Weed 432
Button-bush 242

C

CAMPANULA 364
Campion, Night-flowering 86
Candlewick 464
Cardinal Flower 362

Index.

Carrion Flower 584
Carrot, Wild 218
Cassandra 372
Catnip 494
CAT-TAIL 598
Celandine 44
Charlock 54
Cheeses 94
Chickweed, Common 78
Field 76
Chicory 296
Choke Berry 144
Christmas Berry 104
Cinquefoil, Common 170
Shrubby 176
Silvery 174
Tall 172
Cleavers 244
Clematis, ... 30
Purple 28
Clover, Alsatian 128
Crimson 130
Hop 132
Purple 138
Rabbit-foot 134
Stone 134
White 126
Yellow 132
Cohosh 18
Coltsfoot 250
Columbine 20
COMPOSITE 246
Cone Flower 278
CONVOLVULUS 444
Convolvulus, Upright 446
Coreopsis 278
Cornel, Dwarf 224
Corpse Plant 406
Corydalis, Pale 48
Cowslips 4
Cow Wheat 478
Cranesbill 96
Creeping Charlie 492
Crinkle-root 50
Crowd Weed 54
CROWFOOT 1
Crowfoot, Bristly 26
Marsh 22
Tall 24
Cudweed 304
Currant, Wild 184

D

Daisy, Fleabane 254
Ox Eye 262
Daisy, Pigstye 258
Yellow 278
Dandelion, ... 248
Dwarf 260
Deerberry 384
Dewberry 156
Dockmackie 228
Dodder 448
DOGBANE 418
Dogbane, Spreading 418
Dog Fennel 258
DOGWOOD 224
Dragon-root 604
Dutchman's Breeches 46

E

Elder-flower 234
Elecampane 300
Eupatorium 282
EVENING PRIMROSE . . . 194
Everlasting 304
Life 302
Pearly 302
Plantain-leaved . . . 246
Spring 246

F

Fever-bush 530
FIGWORT 452
Fire-weed 198
Five-finger 170
Flag, Larger Blue 564
Sweet 608
Forget-me-not 440
Fox-berry 240
Foxglove, Downy False 468
False 470
Fringed Polygala 112
Frost Weed 60
FUMITORY 46

G

Garget 518
GENTIAN 436
Gentian, Blind 438
Closed 438
Fringed 436
Gentlemen's Hats 86
GERANIUM 96
Geranium, Wild 96
Gerardia, Downy 468
Little 472
Slender 472

Common Names.

Gerardia, Yellow 470
Geum, White 166
Gill-over-the-ground 492
Ginger, Wild 528
GINSENG 220
Golden Club 602
Golden Jerusalem 278
Golden Rag-wort 256
Goldenrod, Broad-leaved 330
Bushy 318
Common 324
Noble 326
Plume 322
Small Spike 328
Tall 324
White 320
Wreath 332
Goldthread 16
GOURD 204
Grass of Parnassus 186
Green Dragon 604

H

Hardhack 164
Harebell 366
Hawkweed, Canada 266
Early 264
Hairy 270
Tawny 268
Heal All 502
HEATH 370
Hedge Bindweed 446
Hellebore, False 586
Hepatica 1
Herb of St. Barbara 52
Herb Robert 98
High Taper 464
HOLLY 104
HONEYSUCKLE 226
Honeysuckle, ... 378
Bush 232
Smooth-leaved . . . 226
Huckleberry, Squaw 384
Huntsman's Cup 40
Hyssop 500

I

Indian Cucumber root 588
Indian Hemp 420
Indian Paint-brush 456
Indian Pipe 406
Indian Poke 586
Indian Tobacco 360
Indian Turnip 606
Indigo, Wild 120
Innocence 238
IRIS 564
Iris, Wild 564
Ivy, Ground 492

J

Jack-in-the-pulpit 606
Jacob's Ladder 474
Jerusalem Artichoke 316
Jewel-weed 102
Joe Pye Weed 284

K

Kale, Wild 56
Knotweed 524

L

Lady's Ear-drop 102
Lady's Slipper, Larger Yellow . . . 540
Pink 538
Showy 542
Lady's Tresses 560
" " 562
LAUREL 530
Laurel, Ground 370
Mountain 386
Pale 388
Sheep's 390
Leather-leaf 372
Leatherwood 532
Lettuce, White 308
Wild 272
LILY 570
Lily, Cow 36
Field 592
Flame 594
Nodding 592
Trout 570
Wood 594
Linnæa 230
Live-for-ever 188
Liver-leaf 1
Liverwort 1
LOBELIA 356
Lobelia, Brook 358
Spiked 356
Loosestrife, ... 410
Spike 412
Lop-seed 490
Lousewort, ... 454
Common 452
Lucerne 138
Lupine, Wild 116

Index.

M

MADDER 238
MALLOW 94
Mallow, Common 94
Mandrake 34
Maple-leaved Arrow-wood . . . 228
Marigold, Bur 312
Marsh 4
Rayless 314
May Apple 34
Mayflower 370
May-weed 258
Meadow Sweet 162
Meadow Rue, Early 10
Tall 12
Medick 138
Black 136
MEZEREUM 532
Milfoil 306
MILKWEED 422
Milkweed, Common 434
Four-leaved 422
Orange 432
Poke 430
Purple 428
Sand 424
Swamp 426
MILKWORT 112
Milkwort 114
MINT 492
Mint, Wild 506
Mitre-wort, ... 180
False 182
Moccason Flower, Yellow . . . 540
Monkey Flower 480
Moonshine 302
Motherwort 504
Moosewood 532
Mouse-ear 440
Mullein, ... 464
Moth 466
MUSTARD 50
Mustard, Black 56
Field 54

N

Nancy-over-the-ground 182
Nettle, Hemp 514
New Jersey Tea 108
NIGHTSHADE 450
Nightshade, ... 450
Enchanter's 202
Nonesuch 136

O

Old-maids' Bonnets 116
One-seeded Bur-cucumber . . . 204
One-seeded Star-cucumber . . . 204
Orchid, Early Purple Fringed . . . 548
Fringed Green 554
Small Purple Fringed . . . 550
ORCHIS 536
Orchis, Gay 536
Ragged 554
Showy 556
Spring 536
ORPINE 188
Oswego Tea 496

P

Painted Cup 456
Parsnip, Cow 212
Field 216
Meadow 208
PARSLEY 206
Partridge-berry 240
Pea, Wild 116
Pea-nut, Wild 124
Pennyroyal, American 512
Pepper-grass 58
Peppermint 510
Pepper-root 50
PICKEREL-WEED 596
Pickerel-weed 596
Pigeon-berry 518
Pimpernel, Common 416
Pine Sap 404
PINK 76
Pink, Deptford 88
Meadow 548
Mountain 88
Pipsissewa 398
Pitcher Plant 40
PITCHER PLANTS 40
Plantain, Rattlesnake 558
Pleurisy Root 432
Pokeberry 518
POKEWEED 518
Pond-lily, ... 38
Yellow 36
Poor Annie 586
Poor Man's Weather Glass . . . 416
POPPY 42
Prairie Weed 176
PRIMROSE 408
Primrose, Common Evening . . . 196
Day and Night 194
Prince's Pine 398

Common Names.

Pudding-bag-plant 188
PULSE 116
Pussy Plant 134
Pussy-toes 246
Pyrola, One-flowered 396
Small 394

Q

Quaker Ladies 238
Queen Ann's Lace 218
Queen of the Meadows 162

R

Ramsted 474
Raspberry, Purple Flowering . . . 160
Rattlesnake Plantain 558
Rattlesnake-root 308
" " 310
Rattlesnake-weed 264
Red Benjamin 572
Red-root 108
Robin-run-away 492
Robin's Plantain 252
Rock-breaker 178
ROCK-ROSE 60
Rock-rose 60
ROSE 144
Rose, Meadow 152
Pasture 150
Smooth 152
Rosemary, Wild 374
Roxbury Waxwork 106

S

ST. JOHN'S-WORT 90
St. John's-wort, Large 90
Lesser 92
Sand Spurrey 82
Sanicle 210
Sarsaparilla, Wild 220
SAXIFRAGE 178
Saxifrage 178
Scotch-cap 160
Self Heal 502
Senna, Wild 122
Shinleaf 392
Side-saddle Flower 40
Silver-rod 320
Skunk Cabbage 600
Snake-head 482
Snake-root, Black 210
White 282
Snowberry 236
Solomon's Seal, False Little . . . 580
Giant 590
Great 590
Two-leaved 580
Solomon Zigzag 582
Sorrel, Horse 520
Ladies' 100
Sheep 100
" 520
Red 520
Yellow Wood 100
Spatter-dock 36
Spearmint 508
Speedwell, Common 462
Thyme-leaved 458
Upland 462
Spice-bush 530
Spignet 222
Spikenard, ... 222
False 582
Squaw-root 572
Squaw-weed 256
STAFF-TREE 106
Staff-tree 106
Star-flower 408
Star Grass 568
Star-of-Bethlehem 408
Steeple-bush 164
Steeple-top 164
Stitchwort, Long-leaved 80
Stone-crop 188
Straw Bell 576
Strawberry, Wild 146
Succory 296
SUNDEW 190
Sundew 190
Sunflower, Wild 316
Swamp Pink 378
Sweet-briar. 148
Sweet Cicely 206
Sweet-fern 534
SWEET GALE 534

T

Tansy 276
Tare 118
Tear-thumb 522
Thimble-berry 160
Thimble-flower 502
Thistle, Blue 442
Bull 288
Canada 290
Common 286
Common Sow 294
Pasture 288

Thistle, Spiny-leaved Sow . . . 292
Thoroughwort 280
Tick Trefoil 140
Toad Flax, Wild 476
Toothwort 50
Touch-me-not 102
Traveller's Joy 30
Trillium, Nodding 574
Purple 572
Red 572
Trumpet Weed 284
Turtle-head 482
Twin-berry 240
Twin-flower 230
Two-eye-berry 240
Two-leaved Smilax 580

V

Venus's Looking-glass 364
VERVAIN 486
Vervain, Blue 486
Nettle-leaved 488
White 488
Vetch 118
VINE 110
VIOLET 62
Violet, Arrow-leaved 64
Bird-foot 74
Canada 68
Common Blue 72
Dog 70
Dog-tooth 570
Downy Yellow 66
Meadow 72
Running 70
Sand 74
Sweet White 62
Upland 64
Viper's Bugloss 442
Virginia Creeper 110
Virgin's Bower 30

W

Wake Robin 572
" " 574
WATER-LILY 36
Water Nymph 38
Water Pennywort 214
WATER PLANTAIN 610
Whip-poor-will 538
Whip-poor-will's Shoes 542
White Benjamin 574
White Cool-wort 182
White Weed 262
Wild Oat 576
" " 578
Willow Herb, Great 198
Small 200
Wind Flower 6
Winter Berry 104
Winter Cress 52
Wintergreen, ... 402
Chickweed 408
Flowering 112
Spotted 400
Witches' Money-bags 188
WITCH HAZEL 192
Witch Hazel 192
Wormwood 274
Wych Hazel 192

Y

Yarrow 306
Yellow Rocket 52

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